

**CITY OF ISSAQUAH
MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)**

STATE ENVIRONMENTAL POLICY ACT

DATE OF ISSUANCE February 23, 2018

LEAD AGENCY City of Issaquah

AGENCY CONTACT Dan Martinez, Assistant Planner
(425) 837-3124
danielm@issaquahwa.gov

AGENCY FILE NUMBER SDP17-00003

LOCATION OF PROPOSAL 160 Northwest Gilman Boulevard
Issaquah, Washington, 98027
Parcel No. 2769650000

APPLICANT Gilman Point LLC
Attention: Robert Power
165 NE Juniper Street, Suite 100
Issaquah, WA 98027

DESCRIPTION OF PROPOSAL

The proposal entails the construction of one (1) four-story mixed-use building measuring approximately 61,000 square feet. The project includes two (2) ground level retail spaces and approximately 50 ground level covered parking spaces over an area of 3,760 square feet. Three (3) stories (above the ground floor retail and parking) of individually leased workspaces would measure approximately 43,700 square feet. Site improvements would include associated landscaping and utility improvements. The project would join an already permitted four-story, fully enclosed self-storage building measuring approximately 88,000 square feet on the same parcel. The total project site area for both the permitted self-storage building and this studio lofts proposal measures 82,134 square feet (1.89 acres).

A MDNS was issued for the site on July 9, 2015, under ASDP15-00002, which accounted for the following:

A proposal to construct a four story 88,000 square-foot fully-enclosed self-storage building, and a 12,000 square-foot tire shop with seven service bays and a retail/office.

A Category III off-site wetland and wetland buffer extends onto the northwest corner of the subject site. The 50-foot wetland buffer would be reduced by 1,064 SF to a minimum buffer width of 37.5 feet (25% buffer reduction), replaced with 1,075 SF of added buffer area, and the entire on-site buffer area (6,163 SF) would be enhanced with native trees and shrubs.

The abovementioned MDNS has been included as Exhibit A, for your reference. As described above, the 88,000 square-foot self-storage building and its associated utilities and site improvements are currently under construction; however, the approved 12,000 square-foot tire shop and seven (7) service bays have been eliminated and replaced by the current proposal. The proposed commercial building would be located on the southeastern portion of the site, outside of the area of the off-site wetland and wetland buffer.

DETERMINATION

The lead agency has determined that this proposal will not have a probable significant adverse impact on the environment. Pursuant to WAC 197-11-350(3), the proposal has been clarified, changed, and conditioned to include necessary mitigation measures to avoid, minimize or compensate for probable significant impacts. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). The necessary mitigation measures are listed below, the Environmental Checklist is attached (Exhibit B), and this information is available to the public on request.

FINDINGS AND CONCLUSIONS

1. Critical Areas

There is a Category III off-site wetland located adjacent to the East Lake Sammamish Trail (ELST) corridor. The wetland buffer extends onto the northeast corner of the subject site. The off-site wetland has been enhanced as part of mitigation for improvements to the ELST and the current wetland rating considered the enhancement. The 50-foot wetland buffer extending onto the site has been reduced, under the approval of ASDP15-00002, by 1,064 square feet to a minimum buffer width of 37.5 feet (25% buffer reduction), replaced with 1,075 square feet of added buffer area. The entire on-site wetland buffer area of approximately 6,163 square feet is being enhanced with native trees and shrubs. The buffer reduction was limited to only the south end of the wetland buffer, minimizing the extent of buffer impacts. The approved buffer averaging is consistent with the City's Critical Areas Regulations; limiting buffer reductions averaging to 25% of the standard buffer width and providing an equal buffer replacement area. The buffer reduction area consisted of pasture vegetation which did not provide any significant protective buffer functions (i.e., water quality or habitat). The buffer enhancement plan significantly increased the plant species and structural diversity of buffer vegetation, thereby increasing the habitat quality while also providing a physical and visual screen between the development, the wetland, and the ELST.

Final wetland and wetland buffer enhancement plans were required for approval by the City of Issaquah Development Services Department (DSD). Final plans are required to include a planting plan and a 5-year monitoring/maintenance plan with performance standards for monitoring success of the

enhancement planting. The plans are also required to meet the standards of the King County Critical Areas Mitigation Guidelines for planting density and monitoring performance standards.

The wetland and wetland buffer area, as discussed above, was an important consideration for the already-approved self-storage building; however, the proposed studio lofts building being considered under Permit No. SDP17-00003, is located on the southeast portion of the project site, and is entirely outside of the wetland and wetland buffer area.

2. Traffic

A Traffic Impact Study was included as part of the approval for ASDP15-00002; however, that study accounted for the approved tire shop and did not account for the proposed studio lofts building. The study, prepared by Transportation Solutions, Inc. (TSI), dated March 9, 2015, has been included as Exhibit C.

The traffic study evaluated the level of service (LOS) and the 2016 LOS with the development at the intersections of NW Gilman Boulevard and Front Street N, NW Gilman Boulevard and NW Juniper Street, NW Juniper Street and Rainier Boulevard N, and NW Gilman Boulevard and the east driveway entrance into the development site. The analysis concluded the proposal would not impact the LOS at these intersections, except for the stop-controlled, northbound left turn movement from NW Juniper Street onto NW Gilman Boulevard. This turn movement currently operates at LOS F and the proposal would increase the left turn delay by approximately 18 seconds. Improvements and signalization of this intersection are identified in Issaquah's Transportation Improvement Program (TIP). The TIP improvement, which is required as part of this project proposal, would address the LOS deficiency.

A Trip Generation Analysis/Transportation Concurrency report was prepared by TSI to account for the studio lofts proposal. The report, dated August 4, 2017, has been included as Exhibit D. The report documents the anticipated traffic impacts associated with the development proposal. The report concludes that the proposed development would generate 37 PM peak hour trips to the local road network; split 16 in, and 21 out, in addition to two (2) retail pass-by trips. The conclusions are based on trip generation from independent studies of similar projects.

For the purpose of evaluating Transportation Concurrency, the trips generated by the approved tire shop are being replaced by the new proposal. Fourteen new trips were approved for the tire shop. As identified above, 37 PM peak hour trips would be generated by the studio lofts proposal. The net trip impacts to the City of Issaquah's Traffic Model would then be 23 new trips. The City's PM peak hour trip threshold for preparing a formal Traffic Impact Analysis is 30 new trips; therefore, a new Traffic Impact Analysis is not required.

3. Bicycle and Pedestrian Facilities

The Nexus Study for Bicycle and Pedestrian Facilities Mitigation Fees (Henderson Young & Company, December 10, 2014) was adopted by the City Council under Ordinance No. 2733, and was made effective as of February 2, 2015. The study quantifies the direct impact of new development on

the current system of bicycle and pedestrian facilities and the additional demands from future growth to maintain the adopted level of service. The report uses trip generation rates based on the different land use types to quantify the impacts of new development. It also identifies 16 specific bicycle and pedestrian projects that are needed to support the City's level of service standard. Payment of mitigation fees as determined in the study may satisfy a development's requirement to mitigate their project impacts on the level of service standard. If the developer does not voluntarily use the methodology and mitigation fees as determined in the report, the developer may choose other methods to quantify and mitigate their impact including conducting a study of its impacts and identifying alternate means of mitigating impacts to achieve the adopted standards. Applicant objections to the voluntary payment should be made during the SEPA comment period.

4. Public Services

The proposal would have a potential impact on public services, including police and general government buildings. IMC Chapter 3.74, Methods to Mitigate Development Impacts, provides alternatives to mitigate for direct impacts of proposed development. The City may approve a voluntary payment in lieu of other mitigation. Rate studies for police facilities and general government buildings are included in IMC 18.10.260 as the City's SEPA policy base. The rate studies present the methodology and formulas for determining the amount of the mitigation fee commensurate with the proposed land use and project impacts. Applicant objections to the voluntary payment should be made during the SEPA comment period.

MITIGATION MEASURES

The Mitigated Determination of Non-significance is based on the checklist dated October 18, 2017 and supplemental information in the application. The following SEPA mitigation measures shall be deemed conditions of the approval of the licensing decision pursuant to Chapter 18.10 of the Issaquah Land Use Code. All conditions are based on policies adopted by reference in the Land Use Code.

1. Final wetland/wetland buffer enhancement plans are required for approval by the Issaquah Development Services Department (DSD) prior to issuing construction permits. Final plans shall include a planting plan and a 5-year monitoring/maintenance plan with performance standards for monitoring success of the enhancement planting. The plans shall meet standards of the King County Critical Areas Mitigation Guidelines for the planting density and monitoring performance standards.
2. To address the safety and operations of the site access, the driveway access shall be restricted to right-in/right-out turn movements only. The applicant shall install C-curb on NW Gilman Boulevard to limit turn movements. Final plans for the driveway access onto NW Gilman Boulevard shall be approved prior to issuance of construction permits.
3. Due to the configuration of the access driveway, turning movements of large delivery trucks may require both lanes on NW Gilman Boulevard. Therefore, the site access for trucks and

truck trailers 35- feet and longer shall be restricted to the hours between 10:00 p.m. and 6:00 a.m.

4. The applicant shall mitigate for potential impacts on public services and bicycle and pedestrian facilities. The City may approve a voluntary payment in lieu of other mitigation. The current fees based on rate studies are \$50.00 per 1,000 square feet of new building area for the General Government Buildings Mitigation Fee. \$130 per 1,000 square feet for office and \$1,000 per 1,000 square feet for retail are required for the Police Mitigation Fee. The Bicycle-Pedestrian Facility Mitigation Fee is \$1,100 per 1,000 square feet for an office; however, retail uses have not yet been identified, so the fee for the retail uses would need to be determined based on those trip generation uses. Applicant objections to the voluntary mitigation fee payments should be made during the SEPA comment period. The mitigation fee cost would be determined based on the new building area approved in the building permit application and the mitigation fee in effect at permit issuance. The applicant should pay the voluntary contribution prior to issuance of building permits.

COMMENT AND APPEAL PROCEDURES

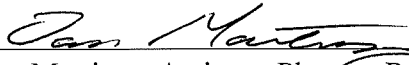
This MDNS is issued under WAC 197-11-350 and 197-11-680. There is a 21-day combined comment/appeal period for this determination, between February 23, 2018 and March 16, 2018. Anyone wishing to comment may submit written comments to the Responsible Official. The Responsible Official will reconsider the determination based on timely comments. Any person aggrieved by this determination may appeal by filing a Notice of Appeal with the City of Issaquah Permit Center. Appellants should prepare specific factual objections. Copies of the environmental determination and other project application materials are available from the Issaquah Development Services Department, 1775 12th Avenue NW.

Appeals of this SEPA determination must be consolidated with appeal of the underlying permit, per IMC 18.04.250.

Notes:

1. This threshold determination is based on review of the construction plans received November 16, 2017; environmental checklist dated October 18, 2017; and other documents in the file.
2. Issuance of this threshold determination does not constitute approval of the permit. The proposal would be reviewed for compliance with all applicable City of Issaquah Codes, which regulate development activities, including the Land Use Code, Critical Area Regulations, Building Codes, Clearing and Grading Ordinance, and Surface Water Design Manual.

This MDNS is issued under WAC 197-11-340(2) and the comment period will end on March 16, 2018.



Dan Martinez, Assistant Planner, Responsible Official

2 - 23 - 2018
Date

List of Exhibits

- A. MDNS for ASDP15-00002, dated July 9, 2015
- B. SEPA Checklist Prepared by the Applicant, dated October 18, 2017
- C. Traffic Impact Study prepared by Transportation Solutions, Inc, dated March 9, 2015
- D. Trip Generation Analyses/Transportation Concurrency prepared by Transportation Solutions, Inc., dated August 4, 2017

Cc: Washington State Department of Ecology
Muckleshoot Indian Tribe
U.S. Army Corps of Engineers
City of Issaquah Development Services Department
City of Issaquah Parks and Recreation Department
City of Issaquah Public Works Engineering

CITY OF ISSAQUAH
MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)

Description of Proposal: Construct a 4-story 88,000 square foot (SF) fully-enclosed self-storage building, and a 12,000 SF retail/service tire shop with 7 service bays and a retail/office area on a 1.89 acre site. Site improvements include 44 parking spaces, associated landscaping and utility improvements. There is a Category III off-site wetland, located in adjacent the East Lake Sammamish Trail corridor, and the wetland buffer extends onto the north corner of the subject site. The 50-foot wetland buffer would be reduced by 1,064 SF to a minimum buffer width of 37.5 feet (25% buffer reduction), replaced with 1,075 SF of added buffer area, and the entire on-site buffer area (6,163 SF) would be enhanced with native trees and shrubs. The site would be accessed from a private driveway off NW Gilman Blvd.

Proponent: Bob Power
Gilman Point LLC
165 NE Juniper St, Suite 100
Issaquah, WA. 98027

Permit Number: ASDP15-00002

Location of Proposal: 160 NW Gilman Blvd

Lead Agency: City of Issaquah

Determination: The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

Comment/Appeal Period: This MDNS is issued under WAC 197-11-340(2) and 197-11-680(3)(a)vii. There is a 21-day combined comment/appeal period for this determination, between **July 9, 2015 and July 30, 2015**. Anyone wishing to comment may submit written comments to the Responsible Official. The Responsible Official will reconsider the determination based on timely comments. Any person aggrieved by this determination may appeal by filing a Notice of Appeal with the City of Issaquah Permit Center. Appellants should prepare specific factual objections. Copies of the environmental determination and other project application materials are available from the Issaquah Development Services Department, 1775 12th Avenue NW.

Appeals of this SEPA determination must be consolidated with appeal of the underlying permit, per IMC 18.04.250.

Notes:

- 1) This threshold determination is based on review of the construction plans received March 10, 2015; environmental checklist received March 10, 2015; and other documents in the file.
- 2) Issuance of this threshold determination does not constitute approval of the permit. The proposal will be reviewed for compliance with all applicable City of Issaquah codes, which regulate development activities, including the Land Use Code, Critical Area Regulations, Building Codes, Clearing and Grading Ordinance, and Surface Water Design Manual.

Findings:

1. Critical Areas - There is a Category III off-site wetland, located in the adjacent the East Lake Sammamish Trail (ELST) corridor, and the wetland buffer extends onto the north corner of the subject site. The off-site wetland has been enhanced as part of mitigation for improvements to the

ELST and the current wetland rating considered the enhancement. The 50-foot wetland buffer extending on the site would be reduced by 1,064 SF to a minimum buffer width of 37.5 feet (25% buffer reduction), replaced with 1,075 SF of added buffer area. The entire on-site wetland buffer area (6,163 SF) would be enhanced with native trees and shrubs. The buffer reduction is limited to only the south end of the wetland buffer, minimizing the extent of buffer impacts. The proposed building would not actually encroach into the wetland buffer, but would be constructed adjacent to the buffer and the required building setback would extend into the buffer area. The proposed buffer averaging is consistent with the City's Critical Areas Regulations; limiting buffer reductions/averaging to 25% of the standard buffer width and providing an equal buffer replacement area. The proposed buffer reduction area currently consists of pasture vegetation and does not provide any significant protective buffer functions (i.e. water quality or habitat). The buffer enhancement plan would significantly increase the plant species and structural diversity of buffer vegetation, thereby increasing the habitat quality and also providing a physical and visual screen between the development and the wetland and ELST. The buffer enhancement would be adjacent to and complement the previously enhanced off-site wetland and wetland buffer located in the ELST corridor.

Final wetland/wetland buffer enhancement plans are required for approval by the Issaquah Development Services Department (DSD) prior to issuing construction permits. Final plans shall include a planting plan and a 5-year monitoring/maintenance plan with performance standards for monitoring success of the enhancement planting. The plans shall meet standards of the King County Critical Areas Mitigation Guidelines for the planting density and monitoring performance standards.

2. Traffic – A Traffic Impact Study (TSI, March 9, 2015) was provided to document and evaluate the traffic impacts related to the development proposal. The study concludes the proposal would generate 17 new PM peak hour trips based on trip generation from independent studies of similar projects.

The traffic study evaluated the existing level of service (LOS) and the 2016 LOS with the proposed development at the intersections of NW Gilman Blvd and Front St N, NW Gilman Blvd and NW Juniper St, NW Juniper St and Rainier Blvd N, and NW Gilman Blvd and the east driveway entrance into the development site. The analysis concluded the proposal would not impact the LOS at these intersections, with the exception of the stop-controlled, northbound left turn movement from NW Juniper St onto NW Gilman Blvd. This turn movement currently operates at LOS F and the proposal would increase the left turn delay by approximately 18 seconds. Improvements and signalization of this intersection are identified in Issaquah's Transportation Improvement Program (TIP). The TIP improvement will address the LOS deficiency.

For the City's new concurrency standards (adopted by Ordinance #2733, effective February 2, 2015), a system-wide transportation concurrency assessment for future planned growth was completed. Road improvements to mitigate for the corresponding planned growth were identified, and a transportation impact fee calculated to fund these road improvements. According to the City's traffic model, adopted level of service (LOS) standards would be maintained and development projects would be concurrent provided the identified road improvements are constructed.

Under the City's new concurrency standards, individual development applications are not required to address their traffic impacts on the local street system, provided a proposal is consistent with the City's planned growth that was previously evaluated in the traffic concurrency model. The subject proposal is consistent with the growth assumptions in the traffic concurrency model. Therefore, the proposed development can withdraw trips from the "trip bank" that was calculated for concurrency and can mitigate their traffic impacts by payment of the traffic impact fee. The traffic impact fee will be used by the City to fund transportation improvements identified in the concurrency model and on the City's Transportation Improvement Program (TIP). Improvements and signalization of the NW

Gilman Blvd and NW Juniper St intersection is identified in Issaquah's Transportation Improvement Program (TIP).

However, the concurrency assessment doesn't address traffic operations and safety at the project site driveway access or at non-concurrency intersections. Currently, during the PM peak hour the eastbound left-turn queue at the intersection of NW Gilman Blvd and N Front St backs up beyond NW Juniper St. Also, the westbound left-turn queue at the intersection of NW Gilman Blvd and NW Juniper St extends beyond the existing left-turn pocket and blocks westbound through traffic flow on NW Gilman Blvd. Due to the existing traffic conditions on NW Gilman Blvd in the immediate vicinity of the site, and to address the safety and operations of the site access, the driveway access shall be restricted to right-in/right-out turn movements only. The applicant shall install C-curb on NW Gilman Blvd to limit turn movements. Final plans for the driveway access onto NW Gilman Blvd shall be approved prior to issuance of construction permits.

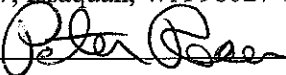
Due to the configuration of the access driveway, turning movements of large delivery trucks may require both lanes on NW Gilman Blvd. Therefore, the site access for trucks and truck trailers 35-feet and longer shall be restricted to the hours between 10:00 PM and 6:00 AM.

3. Bicycle and Pedestrian Facilities – The *Nexus Study for Bicycle and Pedestrian Facilities Mitigation Fees* (Henderson Young & Company, December 10, 2014) was adopted by the City Council, Ordinance #2733, effective February 2, 2015. The study quantifies the direct impact of new development on the current system of bicycle and pedestrian facilities and the additional demands from future growth to maintain the adopted level of service. The report uses trip generation rates based on the different land use types to quantify the impacts of new development. It also identifies 16 specific bicycle and pedestrian projects that are needed to support the City's level of service standard. Payment of mitigation fees as determined in the study may satisfy a development's requirement to mitigate their project impacts on the level of service standard. If the developer doesn't voluntarily use the methodology and mitigation fees as determined in the report, the developer may choose other methods to quantify and mitigate their impact including conducting a study of its impacts and identifying alternate means of mitigating impacts to achieve the adopted standards. Applicant objections to the voluntary payment should be made during the SEPA comment period.
4. Public Services - The proposal would have a potential impact on public services, including police and general government buildings. IMC Chapter 3.74, Methods to Mitigate Development Impacts, provides alternatives to mitigate for direct impacts of proposed development. The City may approve a voluntary payment in lieu of other mitigation. Rate studies for police facilities and general government buildings are included in IMC 18.10.260 as the City's SEPA policy base. The rate studies present the methodology and formulas for determining the amount of the mitigation fee commensurate with the proposed land use and project impacts. Applicant objections to the voluntary payment should be made during the SEPA comment period.

Mitigation Measures: The Mitigated Determination of Nonsignificance is based on the checklist received March 10, 2015 and supplemental information in the application. The following SEPA mitigation measures shall be deemed conditions of the approval of the licensing decision pursuant to Chapter 18.10 of the Issaquah Land Use Code. All conditions are based on policies adopted by reference in the Land Use Code.

1. Final wetland/wetland buffer enhancement plans are required for approval by the Issaquah Development Services Department (DSD) prior to issuing construction permits. Final plans shall include a planting plan and a 5-year monitoring/maintenance plan with performance standards for monitoring success of the enhancement planting. The plans shall meet standards of the King County Critical Areas Mitigation Guidelines for the planting density and monitoring performance standards.

2. To address the safety and operations of the site access, the driveway access shall be restricted to right-in/right-out turn movements only. The applicant shall install C-curb on NW Gilman Blvd to limit turn movements. Final plans for the driveway access onto NW Gilman Blvd shall be approved prior to issuance of construction permits.
3. Due to the configuration of the access driveway, turning movements of large delivery trucks may require both lanes on NW Gilman Blvd. Therefore, the site access for trucks and truck trailers 35-feet and longer shall be restricted to the hours between 10:00 PM and 6:00 AM.
4. The applicant shall mitigate for potential impacts on public services and bicycle and pedestrian facilities. The City may approve a voluntary payment in lieu of other mitigation. The current fees based on the rate studies are \$49.32 per 1,000 SF of new building area for the General Government Buildings Mitigation Fee and the Police Mitigation Fee is \$123.29 per 1,000 SF of new office area and \$912.37 per 1,000 SF for new retail building area. The Bicycle-Pedestrian Facility Mitigation Fee is \$225.00 per 1,000 SF for a tire store and a self-storage facility is not a listed use and will need to be determined based on similar trip generation uses. Applicant objections to the voluntary mitigation fee payments should be made during the SEPA comment period. The impact fee cost will be determined based on the new building area approved in the building permit application and the impact fee in effect at permit issuance. The applicant should pay the voluntary contribution prior to issuance of building permits.

Responsible Official: Peter Rosen
Position/Title: Environmental Planner
Address/Phone: P.O. Box 1307, Issaquah, WA 98027-1307 (425) 837-3094
Date: 7/9/2015 **Signature:** 

cc: Washington State Department of Ecology
Muckleshoot Indian Tribe
U.S. Army Corps of Engineers
Washington State Department of Fish and Wildlife
Issaquah Development Services Department
Issaquah Public Works Engineering and Parks and Recreation Departments

SEPA ENVIRONMENTAL CHECKLIST

SDP17-00003 -
EXHIBIT B

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:
Issaquah Studio Lofts
2. Name of applicant:
Gilman Point LLC
3. Address and phone number of applicant and contact person:
Bob Power – Managing Member
165 NE Juniper Street, Suite 100
Issaquah, WA 98027
Tel. 425-837-9720
4. Date checklist prepared:
October 18th 2017
5. Agency requesting checklist:
City of Issaquah Development Services
6. Proposed timing or schedule (including phasing, if applicable):
Proposed construction to start summer of 2018 pending permit approvals.
Construction would begin within 20 days of building permit issuance.
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
No
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
 - ☐ **Phase I Environmental Site Assessment by Krazan & Associates, Inc. dated November 13, 2014 , as revised for propped site modifications.**
 - ☐ **Phase I Environmental Site Assessment (Additional Records Review) by Krazan & Associates dated December 22, 2014 as revised for propped site modifications.**
 - ☐ **Geotechnical Engineering Investigation by Krazan & Associates, Inc. dated February 20, 2015 as revised for propped site modifications.**
 - ☐ **Preliminary Technical Information Report by PACLAND dated March 6, 2015 as revised for propped site modifications.**
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

- ☐ **SDP (Site Development Permit) Land Use Permit**
- ☐ **Building Permits (each for the self-storage (issued) and Studio lofts (in process) with associated plumbing, mechanical, electrical and fire protection permits**
- ☐ **Utility & ROW permit(s)**
- ☐ **NPDES Construction Stormwater General Permit**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The project proposes construction of (1) 4 story mixed use building of approximately 61,000 sf. Consisting of two ground level retail spaces of approximately 3,760 sf and 50 covered parking spots with 43,700sf of leaseable work spaces in three floors above. This project will join an already permitted 4-story, fully enclosed selfstorage building of approximately 88,000 square feet on the site with Site improvements consist of parking and other site improvements including 44 parking spaces with associated landscaping and utility improvements across a total site area of 82,134 square feet (1.89 acres).

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Site address:

**160 NW Gilman Boulevard
Issaquah, Washington 98027**

Section, Township & Range:

S.E. 1/4 of N.E. 1/4 of Section 28, T. 24 N., R. 06E., W.M.

Tax ID:

884350-0238

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

The site is essentially flat with a small knoll or mound approximately 7 feet high near the eastern corner.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

There is approximately 3 feet of "undocumented fill" underlain by medium dense silty sand to a depth of approximately 25 below existing grade. This is, in turn, underlain by dense to very dense sand, gravel and cobbles.

The project proposes to remove the top 6 to 12 inches of fill soil and replace with structural fill in order to appropriately support the proposed structures and improvements.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None noted in the geotechnical report

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

It is proposed that the top 6 to 12 inches of undocumented fill will be removed from the top of the site in preparation for imported structural fill. The proposed structural fill (approx. 4,500 cy) will consist of either 2- to 4- inch quarry spalls or 1-1/4" minus crushed rock (pending determination of cost and constructability) with possible areas of pit run in non-building areas (parking lot and landscape islands) across approximately 75,000 of the site. The source of the fill has not yet been identified, but a probable source is the Cadman Pit in North Bend, Washington

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Essentially flat site conditions will minimize erosion during clearing, grading and construction. Final site conditions will be essentially flat thus minimizing opportunities for erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 75%

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Best practices for temporary erosion control measures will be implemented during construction. The finished site will be stabilized with approved plantings, landscaping and stormwater collection and management infrastructure.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Exhaust from typical construction equipment will occur during construction. Post construction emissions would consist of exhaust from rooftop mounted HVAC units and typical building air exchange.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None.

3. Water

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There is no surface water body on the site. Immediately offsite to the west is an approximately 8,200 sf wetland.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Development of the site extends up to the existing wetland buffers with proposed buffer averaging, replacement areas and enhancement.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

On-site stormwater runoff from the paved and roof surfaces will be collected and transported via a system of curb, gutter, catch basins and underground storm drainage pipes to a new underground detention vault. Roof runoff will be routed directly to the vault while the remaining areas will be routed through a Modular Wetland for enhanced water quality treatment prior to entering the vault. The treated stormwater will be control-released to a pump system, from where it will be discharged to flow dispersion trenches that outlet to the existing wetland at the northwest end of the site, the natural discharge location.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No. The existing drainage patterns will be maintained in the developed condition.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

On-site stormwater runoff from the paved and roof surfaces will be conveyed to a new underground detention vault for flow control. Roof runoff will be routed directly to the vault while the remaining areas will be routed through a Modular Wetland for enhanced water quality treatment prior to entering the vault. The treated stormwater will be control-released at predevelopment discharge rates to a pump system, from where it will be discharged to flow dispersion trenches that outlet to the existing wetland at the northwest end of the site, the natural discharge location.

4. Plants

- a. Check the types of vegetation found on the site:

☒_XX_deciduous tree: alder, maple, aspen, other
☒_XX_evergreen tree: fir, cedar, pine, other
☒_XX_shrubs
☒_XX_grass
☒_XX_pasture
☐crop or grain
☐Orchards, vineyards or other permanent crops.
☐wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
☐water plants: water lily, eelgrass, milfoil, other
☐other types of vegetation

- b. What kind and amount of vegetation will be removed or altered?

All existing woody vegetation and most of the pasture on the site will be removed. The remaining pasture in the far NW corner will be deconsolidated and planted as part of the wetland buffer enhancement and tree replacement requirements.

- c. List threatened and endangered species known to be on or near the site.

None known

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

A variety of native and ornamental vegetation will be installed as part of the general landscape requirements, tree replacement and environmental work. Plants will consist of trees, shrubs and groundcover species. There will be no lawn within the site boundary.

- e. List all noxious weeds and invasive species known to be on or near the site.

Himalayan and evergreen blackberry, reed canary grass, Scot's broom.

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

birds: **Songbirds, Corvids, Raptors**
mammals: **Goats (domestic), Rodents**

- b. List any threatened and endangered species known to be on or near the site.

None Known

- c. Is the site part of a migration route? If so, explain.

None Known

- d. Proposed measures to preserve or enhance wildlife, if any:

The project will be landscaped in accordance with City of Issaquah requirements. This landscaping shall include perimeter and parking lot landscaping.

- e. List any invasive animal species known to be on or near the site.

None known

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Natural gas fired building heating and cooling units, electrical service for building lighting and operations.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Proposed buildings will be in conformance with the provisions of the Washington State Energy Code.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

- 1) Describe any known or possible contamination at the site from present or past uses.

There is no observable evidence of the site being used as a solid waste dump, sump or sanitary landfill.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

An existing natural gas service line will remain on-site and be extended to the proposed buildings.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

-The Studio lofts will specifically prohibit storage of hazardous or toxic chemicals

- Similarly the self-storage rental agreements specifically prohibit storage of

hazardous or toxic chemicals within the storage units.

- 4) Describe special emergency services that might be required.
No exceptional need for fire, police or emergency aid services is expected.

- 5) Proposed measures to reduce or control environmental health hazards, if any:
None needed

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Traffic noise from adjacent developments, streets and the Interstate 90 freeway should not impact the proposed project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

-Short-term: construction noise will occur during established construction hours.

-Long-term: noise will consist of noise from customer vehicles.

- 3) Proposed measures to reduce or control noise impacts, if any:

-Construction: Storage areas and haul roads will be designated in locations removed from sensitive receptors. Noisy operations will be scheduled concurrently to lessen time of impact. Construction will be limited to established construction hours to reduce impacts during time sensitive time periods, and noisy equipment will be operated only when necessary and switched off when not in use to minimize noise impacts.

-Operations: No noise control measures are needed. Building managers and lease agreements shall maintain complainance with all noise control ordinances of the city of Issaquah.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The current use on the site is a small office building with an integral apartment and an informal pasture. The property to the south-southeast is a restaurant (Pogacha). Adjacent property to the west (with the East Lake Sammamish Trail corridor and 4th Ave NW in between) is a retail center. The proposal will not affect adjacent land uses

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Based on the Phase I Environmental Report the historical use of the site as working farmland or forest land is indeterminate.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

- c. Describe any structures on the site.

There is an existing wood frame, single story building of approximately 6,000 square feet on the site.

- d. Will any structures be demolished? If so, what?

The existing wood frame, single story building of approximately 6,000 square feet will be demolished as part of this project proposal.

- e. What is the current zoning classification of the site?

"MU" Mixed Use

- f. What is the current comprehensive plan designation of the site?

"MU" Mixed Use

- g. If applicable, what is the current shoreline master program designation of the site?

Not Applicable

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Immediately offsite to the west is an approximately 8,200 sf wetland.

- i. Approximately how many people would reside or work in the completed project?

For the self-storage function it is anticipated that one fulltime and one part-time staff will be employed at this location.

For the studio lofts it is anticipated that one fulltime and one part-time staff will be employed at this location. Additionally the facility anticipates leasing ~ 173 short term studio lofts for small buissnes uses. These tend to be occupied part time

For the retail spaces it is anticipated that 3-4 full time staff and an additional 3-4 part time staff will be employed at these locations

There will not be any people residing at either facility.

- j. Approximately how many people would the completed project displace?

Unknown

- k. Proposed measures to avoid or reduce displacement impacts, if any:

None

- L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project will be subject to and in conformance with the City of Issaquah's ASDP process and overall development regulations.

- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

1 middle income apartment will be eliminated

- c. Proposed measures to reduce or control housing impacts, if any:

None

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The tallest building proposed is 61' to the top of the stair tower / elevator overrun(studio lofts building); primary cladding materials will include masonry block, cast-in-place concrete and architectural metal panel

- b. What views in the immediate vicinity would be altered or obstructed?

Some sight-lines between Gilman Blvd and the I-90 corridor could be obstructed.

- b. Proposed measures to reduce or control aesthetic impacts, if any:

Perimeter landscaping and screening of rooftop mechanical units.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Lighting associated with the buildings will be limited to interior lighting seen through the windows, fixed outdoor site lights which will be illuminated during evening hours (varying seasonally) building lights and lights from motor vehicles entering and exiting the site during evening business hours. Glare associated with the store would be limited to reflection of lights off of the un-mirrored glass during daytime hours.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

Neither light or glare from the project are anticipated to create a safety hazard for motorists, air traffic, pedestrians on or offsite or to interfere with views of nearby residents, area workers, tourists, wildlife or domestic animals. The un-mirrored "vision glass" on the buildings is designed to prevent glare not only for safety, but so that retail elements can be clearly viewed by passers-by. Careful consideration was taken during the design process of the photometric plan in order to mitigate any impact on adjacent properties and roadways. The proposed light fixture locations were organized in an effort to provide consistent, uniform lighting throughout the drive aisles and parking areas, while also preventing light pollution and ensuring the safety and security of customers and employees.

- c. What existing off-site sources of light or glare may affect your proposal?

Headlights from cars traveling on 224th Avenue SE and NW Gilman Blvd. will be visible from site but are not anticipated to impact construction or operations of the project as they will be infrequent and blocked by landscaping and trees. Site lights from existing developments to the west and southeast will not be visible due to dense existing tree cover in between properties. Combined levels of light and glare from the project and surrounding areas will not create additional light pollution impacts.

- d. Proposed measures to reduce or control light and glare impacts, if any:

-The project lighting will be designed to provide a safe level of lighting in the parking lot and around the building in accordance with City requirements.

- Glazing on the buildings is designed to prevent glare not only for safety, but so that retail elements can be clearly viewed by passers-by. Careful consideration was taken during the design process of the photometric plan in order to mitigate any impact on adjacent properties and roadways. The proposed light fixture locations were organized in an effort to provide

consistent, uniform lighting throughout the drive aisles and parking areas, while also preventing light pollution and ensuring the safety and security of customers and employees.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
The East Sammamish Trail corridor abuts the west property line.
- b. Would the proposed project displace any existing recreational uses? If so, describe.
No.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.
None known.
- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.
None known.
- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
As part of the Phase I Environmental Site Assessment performed by Krazan & Associates, Inc. historical maps and Local Area Tribal Records were reviewed.
- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.
None proposed.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
The site is accessed near the southern portion of the site via a shared driveway off of NW Gilman Boulevard. This is the only vehicular access to the site.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The site is served by King County Metro bus service along NW Gilman Boulevard with transit stops within approximately 200'-250' west of the Site.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Approximately 16 formal parking spaces will be eliminated and replaced by 82 parking spaces with this project proposal.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

A short length of new sidewalk will connect the project site to the public sidewalk alignment along NW Gilman Boulevard.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The new daily vehicle trips added to the City's road network is estimated to be about 170 vehicle trips per day (85 inbound and 85 outbound). During the PM peak hour the proposal redevelopment will generate 17 new vehicular trips (11 vehicle trips inbound and 6 vehicle trips outbound). Vehicular trips were estimated using the ITE Trip Generation Manual and independent studies. An updated study will be provided prior to administrative site development permit.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

- h. Proposed measures to reduce or control transportation impacts, if any:

No off-site, development generated mitigation appears to be warranted. The applicant will pay traffic impact fees and bicycle and pedestrian mitigation fees. The current estimate of those fees for both uses is to be determined.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No exceptional need for fire, police or emergency aid services is expected. The project proposal will not directly generate any increased need for schools or health care.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

- a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.



Signature:

Name of signee _____ Steven Bohlman _____

Position and Agency/Organization ___ Designer / Jackson Main Architecture ___

Date Submitted: _10/18/2017_____

March 9, 2015

Mike Oxman
Les Schwab Tires, Real Estate
PO Box 5350
Bend, OR 97708

Bob Power
SeaCon, LLC
165 NE Juniper Street
Issaquah WA, 98027

Subject: Gilman Point Self Storage and Les Schwab Tire Center;
Traffic Impact Study – Issaquah, WA



Dear Messrs. Oxman and Power,

This technical analysis documents the traffic impacts related to development of Gilman Point Self Storage and Les Schwab Tire Center located at 160 NW Gilman Blvd. The development site is on the north side of Gilman Blvd and is to the east of the Gilman Blvd and Juniper Street intersection. A vicinity map is attached as **Figure 1**.

The proposal includes redevelopment of 5,976 sq. ft. of existing office space (antiques appraisal, mortgage, and hair salon businesses) located on King County Parcel No. 884350-0238. The development proposal includes a 10,800 sq. ft. Les Schwab Tire Center and an 89,200 gross sq. ft. (65,000 net rentable sq. ft.) self-storage warehouse.

The site access is located off a private roadway adjacent to and fronting Gilman Blvd. Public access to Gilman Blvd is located in the vicinity of Pogacha restaurant. The public access, referred to herein as the east driveway, is approximately 125 feet to east of the Gilman Blvd intersection with Juniper Street. A site plan is provided as **Figure 2** and site occupancy is anticipated by 2016.

This study focuses on development impacts at the east driveway. The report includes:

1. Trip generation
2. Study area
3. Traffic Volumes
4. Level of service and queuing
5. Safety
6. Summary and conclusions

Trip Generation

Afternoon (PM) peak hour trip generation was forecast using data from the *ITE Trip Generation Manual*; 9th Edition (2012) and survey data collected for Les Schwab Tire Centers in Kuna and Meridian, Idaho.

The ITE land use code 849, “tire superstore”, was used to describe the proposed Les Schwab Tire Center, based on the store size and amount of onsite tire storage proposed. In addition, TSI utilized recent (2012 and 2013) data collected for two Les Schwab Tire Centers in Idaho to supplement the ITE data and document a pass-by rate. Les Schwab Tire Center data were compiled for Idaho’s Ada County Highway District (ACHD) as a part of each sites’ post-occupancy study to determine appropriate refunding of traffic impact fees. **Table 1** compares the ITE data for both “tire store” and “tire superstore” land uses to the data collected for the ACHD studies.

Table 1. Les Schwab Tire Center PM Peak Hour Trip Rate Comparisons

Land Use	Size	Trip Rate (per 1,000 sq. ft.)	No. of Studies	Pass-by Rate
Tire Store (ITE land use 848)	6.000 kSF GFA ^{1,2}	4.15	16	28%
Tire Superstore (ITE land use 849)	13.000 kSF GFA ^{1,2}	2.11	13	-
Les Schwab (Kuna, ID)	11.696 kSF GFA ^{1,3}	2.30	115 ⁴	37%
Les Schwab (Meridian, ID)	12.494 kSF GFA ^{1,3}	2.30	100 ⁴	45%

1. 1,000 sq. ft. of gross floor area
2. Average size of the ITE data
3. Site specific information
4. Number of survey respondents

Table 1 shows that a Les Schwab Tire Center is more similar to a tire superstore in terms of trip generation than a tire store. For this study a blended trip rate, computed by averaging the ITE tire superstore and Idaho data, was used to forecast trip generation for the proposed Les Schwab.

Furthermore, the current ITE publication does not provide pass-by trip data for tire superstore land uses. Table 1 shows that the pass-by trip rate specific to a Les Schwab Tire Center is, on average, 41% {[37% (Kuna pass-by rate) + 45% (Meridian pass-by rate)] ÷ 2}.

It is noted that diverted-linked trips were also documented within the Idaho Les Schwab surveys, and like pass-by trips and by their definition, are not considered new-primary trips to the street network. However, to be conservative this analysis does not reduce the Les Schwab Tire Center trip generation by a diverted-linked trip rate.

Land use code 151, “mini-warehouse”, was used to characterize the proposed self-storage building. Land use code 710, “general office building”, was used to characterize the existing office use, to be removed with the proposed development.

Table 2 shows the trip generation calculations.

The current proposal generates 17 new PM peak hour trips, split 11 inbound and 6 outbound. The level of service analysis that follows is based on an older and slightly larger development plan that results in the site generating 22 total new PM peak hour trips rather than the 17 new PM peak hour trips projected based on the current site plan.

Table 2. PM Peak Hour Development Trip Generation

Land Use	Land Use ¹	Size ²	Trip Rate (per 1,000 sq. ft.)	Pass-by Rate	Trips In	Trips Out	Trips Total
Les Schwab	-	10.800 kSF GFA	2.24 ³	41% ³	7	7	14
Mini-Storage	151	65.000 kSF NRA	0.19	-	6	6	12
Existing Office	710	5.976 kSF GFA	(1.49)	-	(2)	(7)	(9)
New Trips				10 trips	11	6	17

1. ITE Land Use Code
2. Land Use Size expressed as 1,000 sq. ft. of either gross floor area (GFA) or net rentable area (NRA)
3. ITE trip rate data and Les Schwab Tire Center data

Issaquah standards state that a traffic impact analysis is required for any developments projected to generate 30 or more peak hour trips. The proposal does not meet the city's requirement for a preparing a formal traffic impact analysis. As such, this letter report focuses on the with-development traffic operations at the east driveway.

Figure 3 illustrates the PM peak hour trip assignment, based on existing traffic patterns.

Study Area

NW Gilman Boulevard is classified as a minor arterial and has a posted speed limit of 35 mph. To the west of the Juniper Street, Gilman Blvd has two travel lanes eastbound and westbound and a center landscaped median. Between Juniper Street and the east driveway the center median has been removed and the roadway is striped with back-to-back left turn pockets for eastbound lefts to the east driveway and westbound lefts to Juniper Street. East of the east driveway Gilman Blvd widens to accommodate five travel lanes: three eastbound lanes approaching Front Street and two westbound lanes from Front Street past the east driveway.

NW Juniper Street is classified as a collector arterial and has a posted speed limit of 25 mph. Juniper Street is stop sign controlled as it approaches Gilman Blvd from the southwest. The roadway is also stop sign controlled as it approaches Rainier Blvd from the southwest.

Rainier Boulevard N is classified as a collector arterial and has a posted speed limit of 25 mph. Rainier Blvd approaches Juniper Street from the east. The roadway is stop sign controlled at Juniper Street. On Juniper Street, the Rainier Blvd intersection is about 40 feet southwest of Gilman Blvd with a maximum car storage of two vehicles.

Traffic Volumes

On February 11, 2015 traffic volumes were collected at Gilman Blvd and Front Street, at Gilman Blvd and the east driveway, at Gilman Blvd and Juniper Street, and at Juniper Street and Rainier Blvd. Copies of the traffic volume data are attached for reference. The PM peak hour for the study area intersections was found to occur between 4:45 and 5:45 PM. **Figure 4** illustrates the year 2015 existing PM peak hour traffic volumes in the vicinity of Gilman Point.

Future year 2016 volumes were projected by adding background (non-development related) traffic growth and development-generated traffic volumes to the local road network. **Figure 4** illustrates future with development traffic volumes.

Background non-development related traffic growth was forecast by comparing the traffic volumes collected on Juniper Street at Gilman Blvd and at Rainier Blvd in 2012 and in 2015, the former was provided by the City of Issaquah. Average peak hour growth at these two intersection is 2.5% annually. Thus, future year 2016 background volumes were increased by a 2.5%.

Level of Service

Level of service was computed at the east driveway using Synchro. Two-way stop controlled intersections were evaluated using the HCM 2010 methodology, while the Front Street signalized intersection analysis is presented using HCM 2000 methodology, due to the intersection's unique signal phasing which is not recognized by the newer (2010) HCM methods. Signal timing information for the Front Street signal and for the pedestrian signal west of Juniper Street were provided by Issaquah staff.

Level of service and delay calculations for existing and future with development conditions are summarized in **Table 3**.

Table 3. 2015 Existing and 2016 With-Development PM Peak Hour Level of Service and Delay

Intersection	Control	Mvmt. / Average	2015 Existing		2016 With-Development	
			LOS	Delay	LOS	Delay
Gilman / Front	Signal	Average	D	41.9	D	43.4
Gilman / East Driveway	SB Stop	EB Left	A	9.3	A	9.4
		SB App.	C	18.7	C	21.0
Gilman / Juniper	NB Stop	WB Left	B	12.1	B	12.5
		NB App.	F	60.7	F	78.5
Juniper/ Rainier	NB/WB Stop	WB App.	B	14.6	B	14.8
		NB App.	A	9.2	A	9.2

At signalized intersections the City of Issaquah level of service standard is LOS D when the delay increases by greater than five seconds. With the development, the level of service and delay at Gilman Blvd at Front Street does not trigger this level of service threshold.

At unsignalized intersections, the City of Issaquah level of service threshold is LOS D when development traffic is projected to increase the critical movement delay by greater than five seconds. With the development, Gilman Blvd at the east driveway and Juniper Street at Rainier Blvd satisfy the level of service threshold.

The Gilman Blvd and Juniper Street intersection, specifically the stop controlled northbound left turn movement from Juniper Street currently operates at LOS F. The development is projected to increase the left turn delay by about 18 seconds.

Issaquah's 2015-2020 *Transportation Improvement Program (TIP)* identifies funding for an intersection improvement at Gilman Blvd and Juniper Street with the signalization of this intersection, and potential modifications to the east driveway by 2020. This TIP improvement will likely address this deficiency.

Queuing

SimTraffic was used to evaluate queuing impacts at the site access and at the Juniper Street and Rainier Blvd intersections. **Figure 5** illustrates the local vehicle queues.

East Driveway

At the east driveway average queues are about 2 car lengths and 95th-percentile queues are roughly 7 car lengths with the development. A 7 car vehicle queue is typical during the peak hour at a stop controlled intersection on Gillman Blvd. The driveway is modeled with left and right turn egress. At LOS C the east driveway operates at an acceptable level.

Left turn queues from Gilman Blvd to the east driveway are projected to extend to about 2 car lengths. There is 30-40 feet of left turn vehicle storage available within the existing turn lane and the left turn queue generally fits within that vehicle storage space.

Eastbound vehicles were observed stacking back (west) to a point near the east driveway within the two left turn lanes at Front Street. This observed queue dispersed in less than a minute, but occurred twice during a half hour period from 4:00 to 4:30 PM. The condition is a function of the volume currently on the roadway and green time allocated to the eastbound left turn movement at Front Street. Egress from the east driveway did not appear to be impeded when this condition occurred.

Juniper Street @ Gilman

At Juniper Street the westbound left turn average queue extends to just over 2 car lengths and the 95th-percentile queue extends to just over 4 car lengths. Typically, vehicles will not extend into the westbound through travel lanes. Field observations within the study area concluded that there were times when the westbound left turn vehicle queue appeared to spillback into the through lanes, by up to one car length. However, the standing queue was observed to last only a few seconds and had a negligible impact, if any, on the westbound through moving traffic flow.

Northbound queues on Juniper Street approaching Gilman Blvd frequently stack to Rainier Blvd when waiting for a gap in the eastbound and westbound traffic flow on Gillman Blvd. Although not modeled, some drivers were observed crossing the eastbound traffic flow into the center lane and then merging with the westbound traffic when a gap was available (a two-stage left turn). The traffic signal at 4th Ave and to a lesser extent the pedestrian crossing signal between 4th Ave and Juniper Street provides gaps in the eastbound traffic flow on Gilman Blvd.

Juniper Street @ Rainier

The southbound approach on Juniper Street is uncontrolled at Rainier Blvd, while the northbound approach on Juniper Street is stop sign controlled along with the Rainier Blvd approach. Drivers northbound generally adhere to the stop sign controls and do not encroach into the Rainier Blvd intersection. Traffic observations noted an occurrence of vehicles encroaching into the Rainier Blvd intersection which precludes the southbound left into Rainier Blvd and also vehicles stacking up along the eastbound curb lane on Gilman Blvd.

The northbound stop controlled approach on Juniper Street approaching Rainier Blvd extend up to 12 car lengths back from the stop bar. On average the queue is about 4 car lengths. The lengthy queue is due to the over one minute delay at Juniper Street approach to Gilman Blvd.

Safety

A collision history from 2009 through 2014 was provided by WSDOT on Gilman Blvd at the east driveway and at Juniper Street. **Table 4** summarizes the collision history.

Table 4. Collision History

Location: On Gilman Blvd at	Total Collisions by Year						Result Injury ²	Annual Avg. ³
	2009	2010	2011	2012	2013	2014 ¹		
East Driveway	2	1	0	0	0	0	1	0.6
Juniper Street	2	5	2	2	7	3	5	3.6
Collision Types ⁴	At Angle		Left Turn		Sideswipe		Object	
East Driveway	100%		0%		0%		0%	
Juniper Street	43%		52%		5%		0%	

1. Collision data for 2014 is incomplete
2. Number of collisions that resulted in a reported injury, does not equal total injuries
3. Annual average collisions (2009-2013)
4. Distribution of 2009-2014 collisions by "Collision Type"

At the east driveway the five year (2009-2013) average collision rate reported is 0.6 collisions per year (three collisions in five years). One collision involved a vehicle turning left from Gilman Blvd into the east driveway colliding with a vehicle heading west on Gilman Blvd. The second collision involved a vehicle turning left out from the driveway to Gilman Blvd colliding with a vehicle heading west on Gilman Blvd. The third collision involved a vehicle making an eastbound to westbound "U-turn" colliding with a vehicle making a right turn into the east driveway. There were no east driveway related collisions reported since 2011. Thus, there is no regular or recurring collision pattern.

At Gilman Blvd and Juniper Street the five year collision rate is 3.6 collisions per year. In 2013 there were seven collisions reported. Of the total reported collisions between 2009 and 2014, 52% involved vehicles making a left turn from Gilman Blvd to Juniper Street, 43% involved vehicles turning from Juniper Street to Gilman Blvd, and 5% (one collision,) involved an eastbound driver changing lanes and sideswiping another vehicle.

On Site Circulation

Figure 6 provides a truck turn template for the site. This shows that delivery truck access and circulation can be reasonably accommodated. The east access is at an existing driveway location; and thus, sightlines should continue to meet city standards.

Traffic Impact Fee

The City of Issaquah required new development to pay both traffic impact and bike and pedestrian mitigation fees to reimburse local government for the capital costs of public facilities improvements.

The current fee schedule does not include a fee specific to a Les Schwab Tire Center, as documented in **Table 1**, generates substantially fewer trips compared to a tire store. Thus, the city's fee rates for a tire store land use were adjusted to account the nature of the Les Schwab Tire Center, the adjusted fee rate is documented in **Table 5**.

Table 5. Les Schwab Tire Center Proposed Mitigation Fee Rates

Land Use		Trip Ends (per 1000 sq. ft.)	Traffic Impact Fee (per square foot)	Bike and Pedestrian Mitigation Fee (per square foot)
		(i)	(ii)	(iii)
A	Tire Store	4.15 ¹	\$23.55 ²	\$2.25 ²
B	Les Schwab Tire Center	2.24 ³	\$12.71 ⁴	\$1.21 ⁵

1. From *Issaquah Traffic Impact Fees Rate Study* (December 10, 2014) by Henderson Young & Company
2. From Table 4 of the February 3, 2015 *Issaquah Impact & Mitigation Fee Schedule*
3. Rate from **Table 2** for Les Schwab Tire Center
4. Les Schwab Traffic Impact Fee Formula = $A(ii) \div A(i) \times B(i)$
5. Les Schwab Bike and Pedestrian Mitigation Fee Formula = $A(iii) \div A(i) \times B(i)$

Table 6 summarizes the traffic impact fee estimate.

Table 6. Gilman Point Mitigation Fee Estimate

Land Use (ITE Land Use)	Traffic Impact Fee		Bike and Pedestrian Mitigation Fee		Total Fee
	Rate ¹	Fee	Rate ¹	Fee	
Mini-Warehouse (LU 151)	\$1.84 ²	\$164,128	\$0.18 ²	\$16,056	\$180,184
Les Schwab Tire Center	\$12.71 ³	\$137,268	\$1.21 ³	\$13,068	\$150,336
Existing Office (LU 710)	\$(10.58) ²	\$(63,226)	\$(1.01) ²	\$(6,036)	\$(69,262)
Fee Estimate					\$261,258

1. Fee Rate = cost per square feet of floor area
2. From Table 4 of the February 3, 2015 *Issaquah Impact & Mitigation Fee Schedule*
3. See **Table 5**

Summary and Conclusions

In summary, the proposal is projected to generate up to 17 new PM peak hour trips to the city's roadway network. With the development the east driveway at Gillman Blvd is projected to operate at LOS C which is better than the City's adopted level of service standard. At the nearby Gilman Blvd intersection with Juniper Street the level of service is projected to operate at LOS F which is a pre-existing level of service deficiency.

Additionally and at the east driveway, the eastbound left turn movement inbound from Gilman Blvd is projected to operate well at LOS A within the existing storage area on Gilman Blvd. Vehicle queues do not appear to adversely affect traffic operations at the east driveway.

The westbound left turn movement from Gilman Blvd to Juniper Street operates at LOS A and the vehicle queues generally are within the storage area and have a marginal impact on PM peak hour westbound through moving vehicles on the mainline.

Lastly, there have been no collisions related to the east driveway since 2010.

In conclusions, no mitigation is recommended. The access appears to function similar to current conditions with minimal impacts related to the proposed development. The City of Issaquah is planning a future improvement at the Gilman Blvd and Juniper Street intersection and this future improvement could affect traffic flow at the east driveway.



We estimate the mitigation fee at \$261,258 using the city's Traffic Impact Fee and Bicycle and Pedestrian Mitigation Fee schedule. The mitigation fee will serve to address the project share of City improvements and thus addresses the project's share of mitigation obligations.

We trust, this traffic review provides you and the City of Issaquah staff with the information needed to assess the potential impacts of the reuse of this site. If you or city staff have any questions, please contact TSI at your convenience.

Sincerely,
Transportation Solutions, Inc.

A handwritten signature in black ink, appearing to read "J. Hee", with a long, sweeping horizontal line extending to the right.

Jeffrey P.K. Hee, P.E.
Project Engineer

Attachments

cc. Dirk McCullough, Magellan Architects
Brent Carson, Van Ness Feldman LLP



Figure 1:
Vicinity Map

Gilman Point Self Storage and
Les Schwab Tire Center
Issaquah, WA

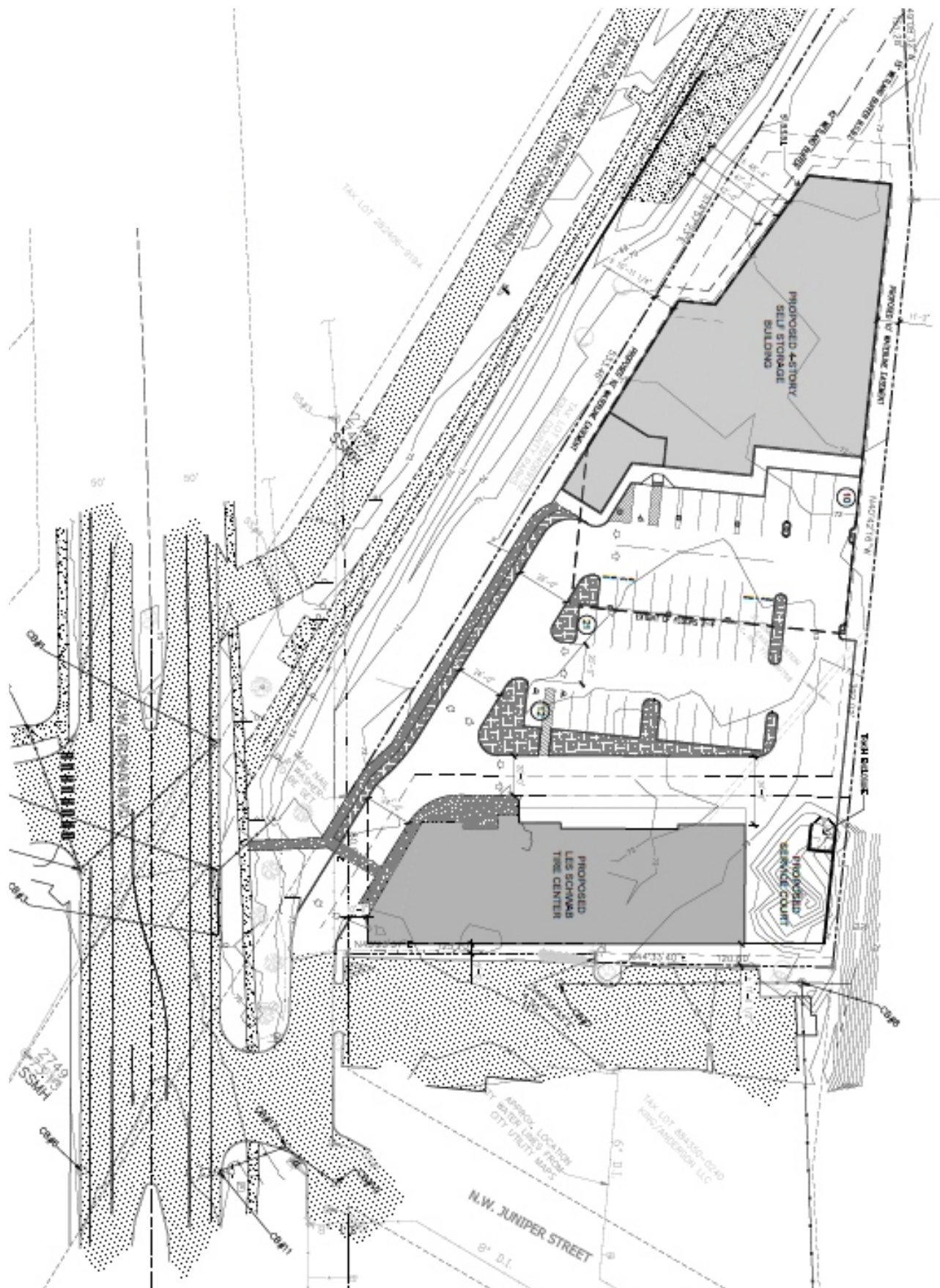
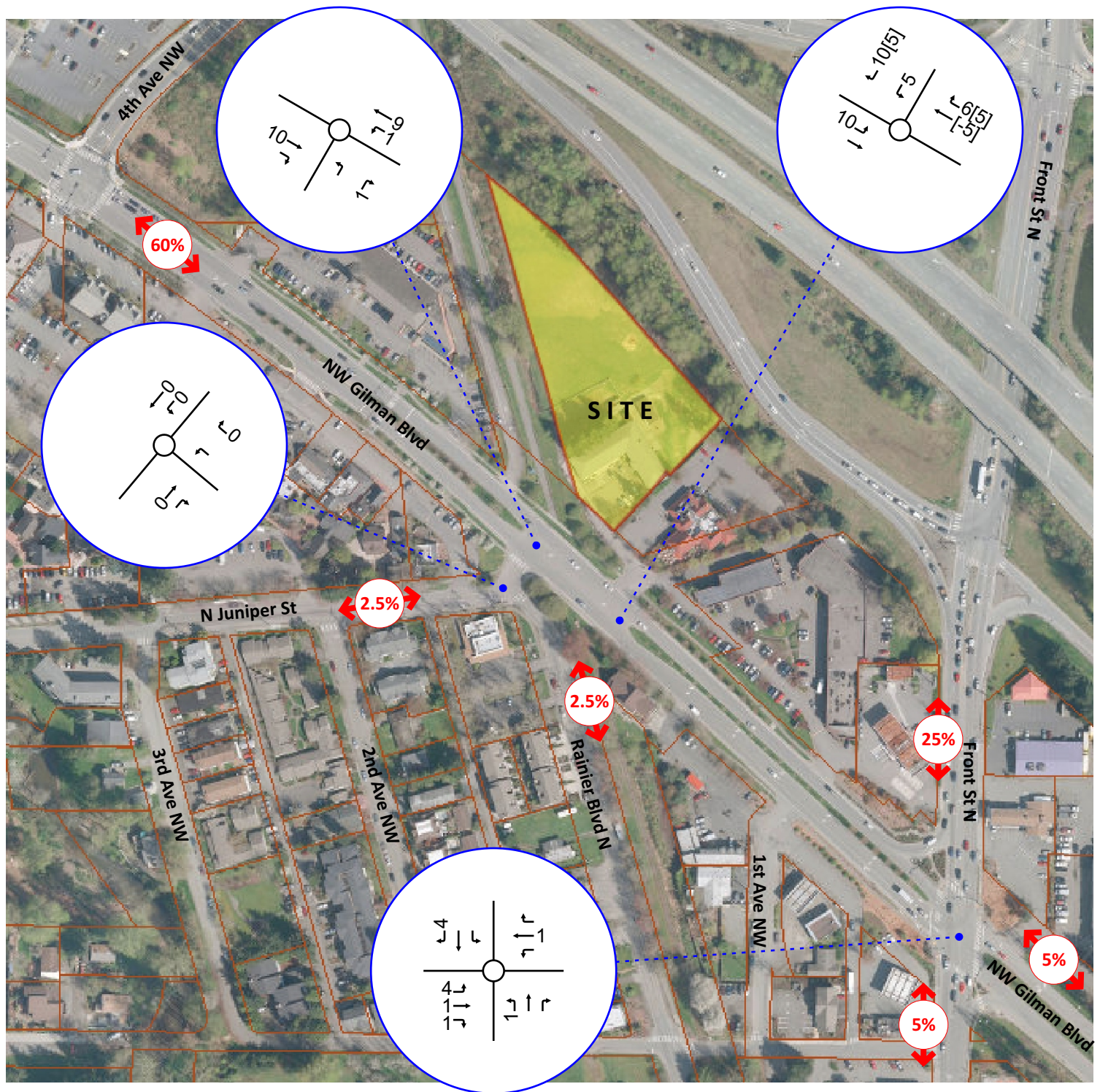


Figure 2:
Site Plan

Gilman Point Self Storage and
Les Schwab Tire Center
Issaquah, WA



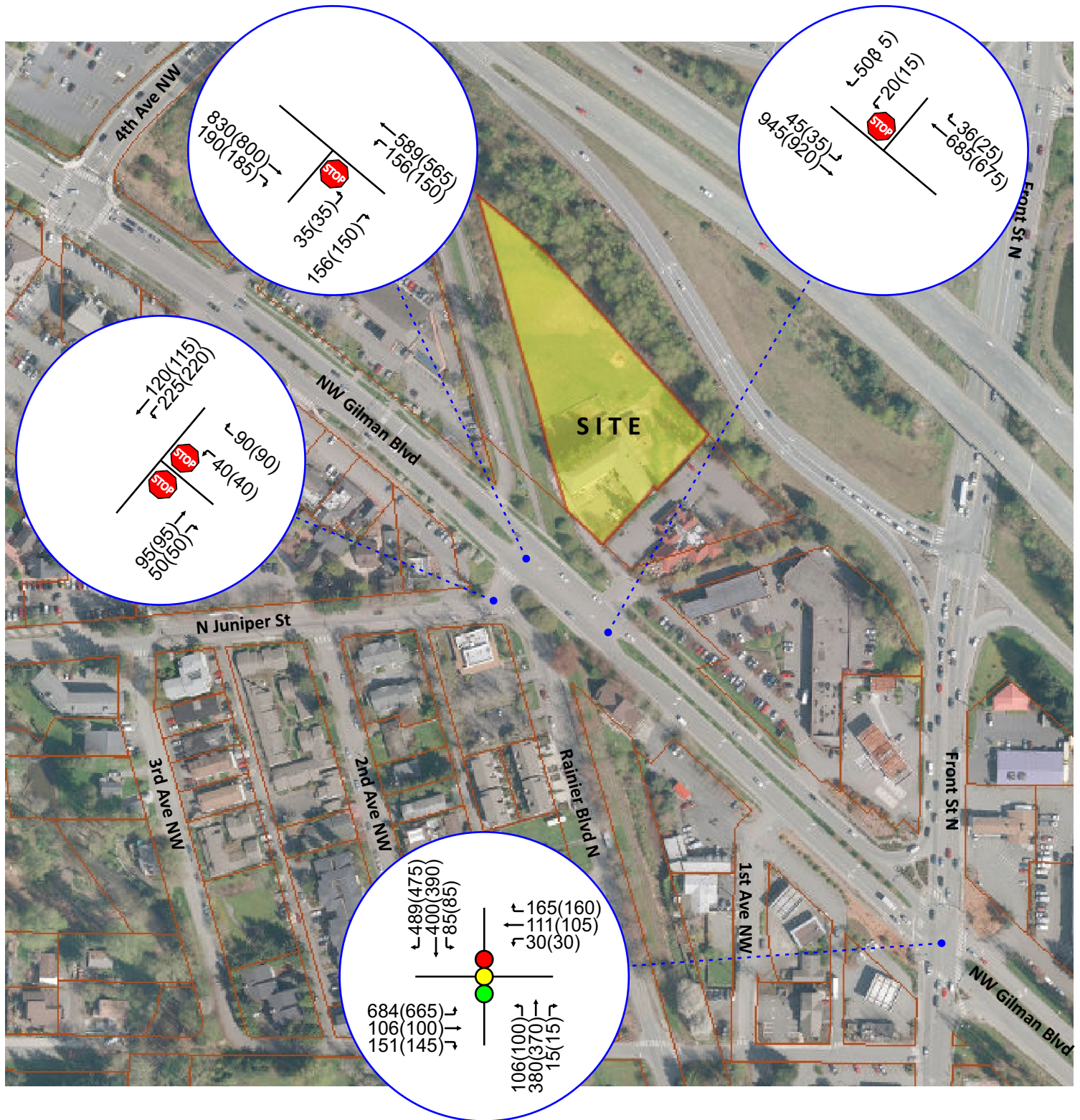
Directional Trip Distribution

6[5]

Non-Pass-By Trip [Pass-By Trip]

Figure 3:
PM Peak Hour Trip Assignment

Gilman Point Self Storage and
Les Schwab Tire Center
Issaquah, WA



165(160) 2016 With-Development Vol. (2015 Existing Vol.)



Stop Sign Control



Signal Control

Figure 4:
2015 Existing and 2016 With-Development
PM Peak Hour Traffic Volumes

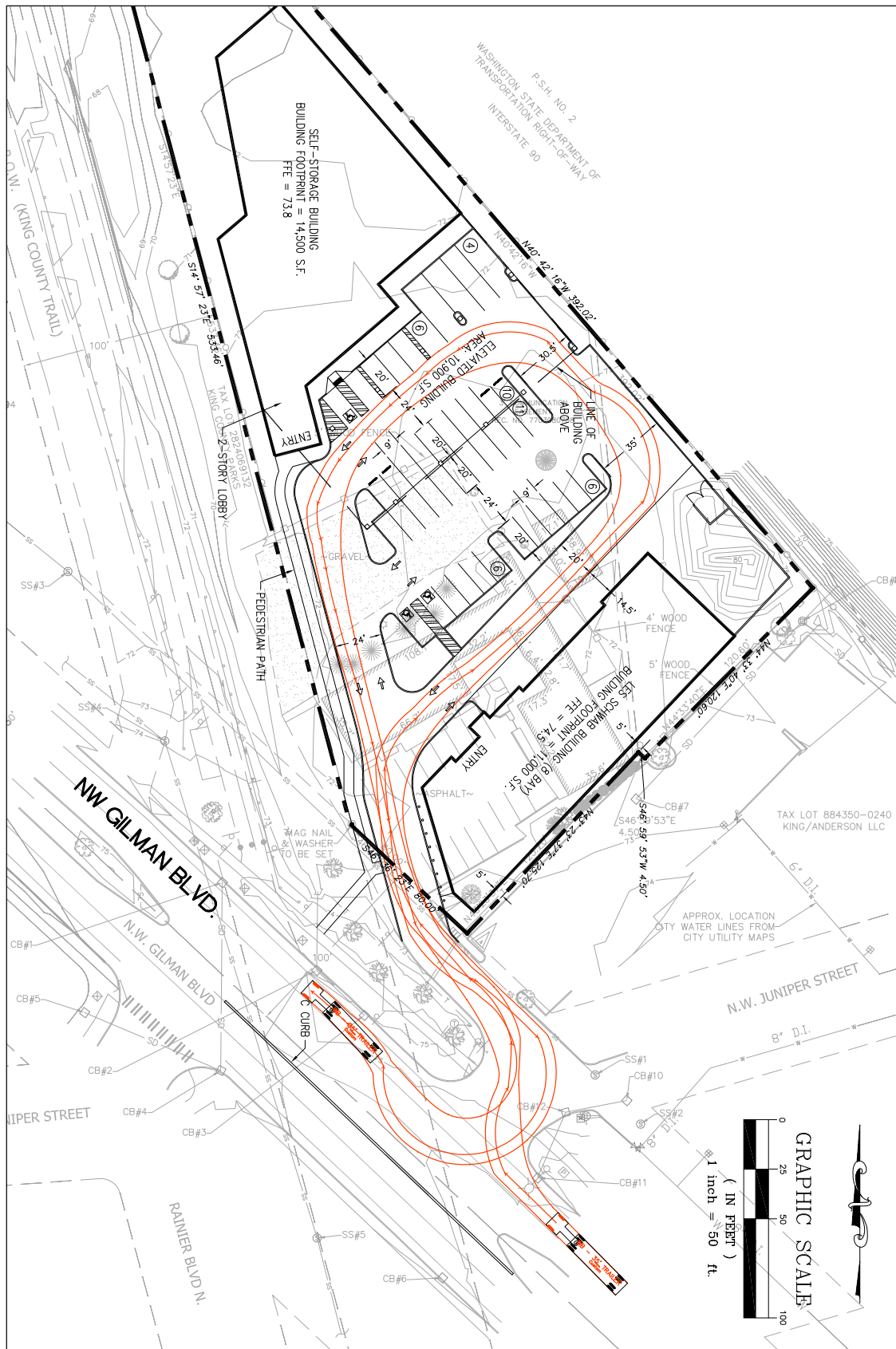


95th-Percentile Queues

- ➔ 2015 Existing
- ⋯➔ 2016 With-Development

Note: Existing condition queues may be longer than future with-development queues due to the random vehicle placement with the SimTraffic model. The longer of the two queue models is reported. SimTraffic was run for eleven randomly seeded model runs.

Figure 6





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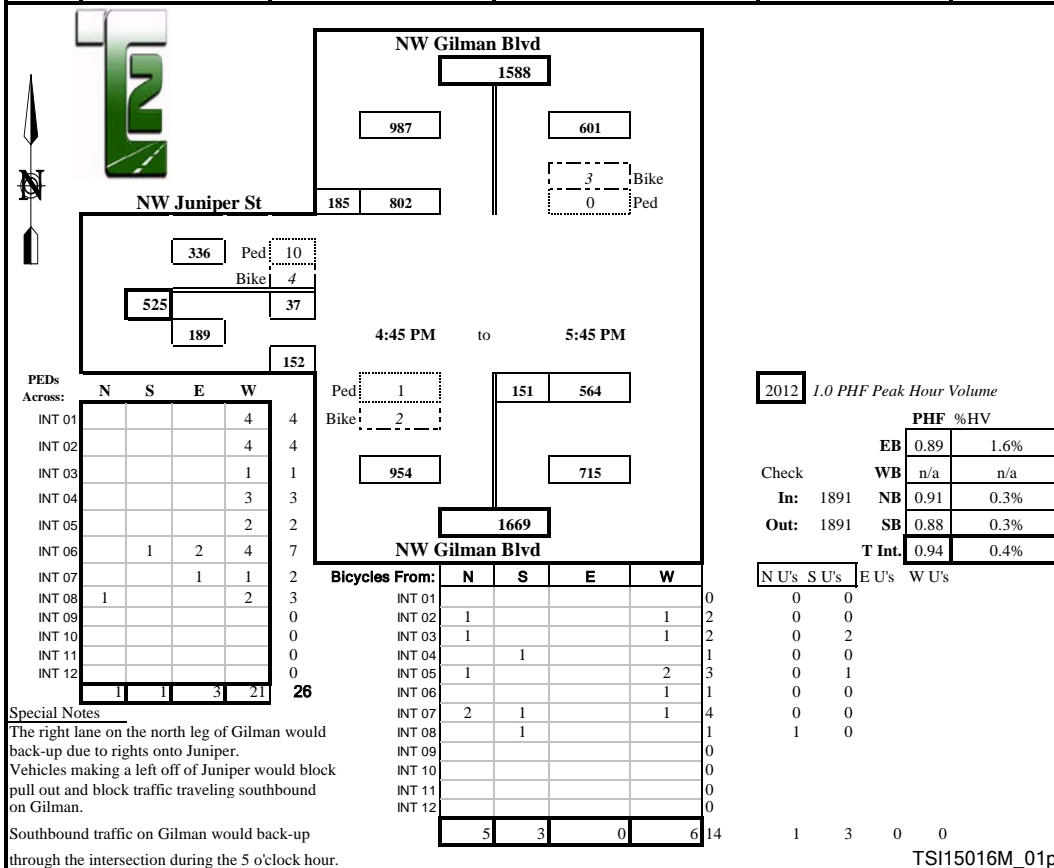
Transportation Solutions, Inc.**Traffic Count Consultants, Inc.**

Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: NW Gilman Blvd & NW Juniper St**Date of Count:** Wed 2/11/2015**Location:** Issaquah, Washington**Checked By:** Jess

Time Interval	From North on (SB) NW Gilman Blvd				From South on (NB) NW Gilman Blvd				From East on (WB) 0				From West on (EB) NW Juniper St				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	2	0	176	48	1	43	157	0	0	0	0	0	0	5	0	43	472
4:30 P	3	0	138	50	0	29	144	0	0	0	0	0	0	6	0	39	406
4:45 P	0	0	173	52	2	44	127	0	0	0	0	0	0	11	0	28	435
5:00 P	1	0	167	46	0	50	123	0	0	0	0	0	0	10	0	42	438
5:15 P	0	0	201	52	1	33	164	0	0	0	0	0	2	8	0	45	503
5:30 P	0	0	234	48	0	29	152	0	0	0	0	0	1	10	0	26	499
5:45 P	2	0	200	39	1	39	125	0	0	0	0	0	0	9	0	39	451
6:00 P	1	0	217	50	1	16	127	0	0	0	0	0	0	5	0	19	434
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	9	0	1506	385	6	283	1119	0	0	0	0	0	3	64	0	281	3638
Peak Hour: 4:45 PM to 5:45 PM																	
Total	3	0	802	185	2	151	564	0	0	0	0	0	3	37	0	152	1891
Approach	987				715				0				189				1891
%HV	0.3%				0.3%				n/a				1.6%				0.4%
PHF	0.88				0.91				n/a				0.89				0.94



TS15016M_01p



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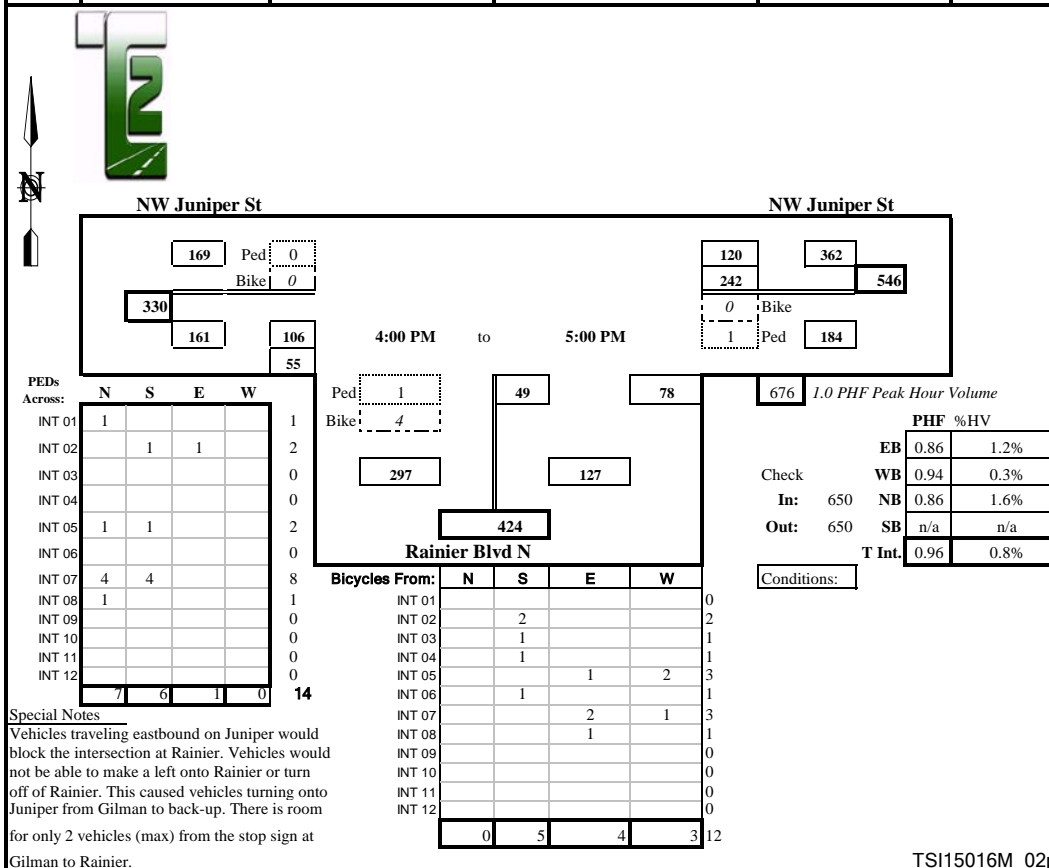
Transportation Solutions, Inc.**Traffic Count Consultants, Inc.**

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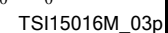
WBE/DBE

Intersection: Rainier Blvd N & NW Juniper St**Date of Count:** Wed 2/11/2015**Location:** Issaquah, Washington**Checked By:** Jess

Time Interval	From North on (SB)				From South on (NB)				From East on (WB)				From West on (EB)				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	0	0	0	12	0	18	0	51	40	0	1	0	30	13	164
4:30 P	0	0	0	0	0	15	0	19	1	52	27	0	0	0	26	9	148
4:45 P	0	0	0	0	2	12	0	14	0	72	24	0	1	0	25	22	169
5:00 P	0	0	0	0	0	10	0	27	0	67	29	0	0	0	25	11	169
5:15 P	0	0	0	0	0	8	0	26	0	57	28	0	0	0	27	17	163
5:30 P	0	0	0	0	0	13	0	18	0	45	32	0	0	0	18	10	136
5:45 P	0	0	0	0	0	11	0	21	1	50	28	0	0	0	27	10	147
6:00 P	0	0	0	0	0	8	0	8	0	43	23	0	0	0	16	16	114
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	2	89	0	151	2	437	231	0	2	0	194	108	1210
Peak Hour: 4:00 PM to 5:00 PM																	
Total	0	0	0	0	2	49	0	78	1	242	120	0	2	0	106	55	650
Approach	0				127				362				161				650
%HV	n/a				1.6%				0.3%				1.2%				0.8%
PHF	n/a				0.86				0.94				0.86				0.96



TS15016M_02p



TSI15016M 04p



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October 18, 2012

To: Christy Little, Ada County Highway District

Copy: Michael Oxman, Les Schwab Tire Company

From: David Markley, P.E.
James Webb, P.E., PTOE

Project: Les Schwab Tire Center , Kuna, Idaho

Subject: Traffic Impact Individual Assessment

This memorandum documents an Individual Assessment for the Les Schwab Tire Center located at 975 E Avalon Street, Kuna, Idaho in the Ada County Highway District's (ACHD) Southwest service area as depicted in Figure 1.

This study is permitted as part of an agreement between the ACHD and Les Schwab Tire Company whereby Les Schwab has the opportunity to qualify the factors that contribute to the Traffic Impact Fee that was assessed at the time of original approval of this development. Les Schwab Tire Company paid \$71,201 (including a 20% surety) in traffic impact fees at the time of building approval to offset expected impacts of traffic traveling to/from the Kuna Les Schwab Site and impacting all ACHD roads. This fee was based on ACHD standards for a Tire Store.

The Les Schwab Tire Center is an 11,696 square foot building on a site shared with an adjacent Walgreens drugstore. The combined site is served by a total of four driveways, two associated with each of the uses. The Les Schwab project site is shown on Figure 2.

Transportation Solutions, Inc. (TSI) prepared an Individual Assessment for the Kuna Les Schwab Tire Center using the data collected at the existing site to determine if the development should be assessed a lower Traffic Impact Fee. This assessment was prepared in accordance with the methodologies outlined in the *ACHD Guidebook for Conducting Individual Assessments*, and addresses your comments on the previous analysis. The results of this analysis showed that ACHD standards methodology overestimated the impacts of the Kuna Les Schwab Tire Center and therefore, a refund is due to Les Schwab Tire Company. Attachment A contains the Individual assessment Results sheet from the *ACHD Guidebook* spreadsheet.

Data Collection

The Les Schwab Tire Center has been fully developed. The business has been in operation for approximately 24 months. Therefore, to accurately assess the travel pair characteristics associated with this site, surveys work performed to gather the data needed to establish a local

peak hour trip generation rate, new trip factor, average trip length, and network adjustment factor.

Surveys were conducted on six weekdays - Tuesday October 2nd through Thursday October 4th, and Tuesday October 9th through Thursday October 11th.

Peak Hour Trip Rate

Manual movement counts were conducted during an average weekday PM peak hour (4 PM to 6 PM on Tuesday-Thursday) for days as outlined above. Counts were made at each of the four driveways. Trips associated with vehicles traveling to/from the adjacent Walgreens drugstore were excluded from these counts since they are not related to the trip making characteristics for the Les Schwab Tire Center.

The six days of survey show the Kuna Les Schwab Tire Center generates weekday PM peak hour trips at a rate of 2.294/1,000 sf. Attachment B contains the turning movement counts used to establish this rate.

New Trip Factor, Average Trip Length, and Network Adjustment Factor

Surveys of existing patrons and employees of the existing Kuna Les Schwab Tire Center were conducted during the same periods as the turning movement counts were conducted. The individuals exiting the site were surveyed using the *Trip Type and Length Questionnaire* contained in the *ACHD Guidelines*. Individuals answering "yes" to question 2 were counted as primary trips and provided a map of Ada County to identify the intersection nearest to where they started their trip. Individuals answering "yes" to question 3 were counted as pass-by trips. Individuals answering "no" to question 3 were counted as diverted trips and provided a map of the site vicinity to identify the nearest intersection that they would have traveled through on their normal route. Attachment C contains the questionnaires and maps used in this assessment. In both instances the length of each trip and the length of each trip on ACHD roadways, was determined using online mapping software.

This data was then entered into the all *ACHD Guidebook* spreadsheet which calculated the new trip, average trip length, and network adjustment factor for this site. Attachment D contains the summary sheets from the *ACHD Guidebook* for all five days of this survey. The six days of this survey resulted in 117 surveys which satisfies the 100 survey requirements established in the *ACHD Guidelines*.

Results

The results of the Kuna Les Schwab tire Center Individual Assessment are summarized in Table 1. This summary is based on the calculations made in the *ACHD Guidebook* spreadsheet, ACHD Ordinance 202 (Reference 22) and the Traffic Impact paid by Les Schwab Tire Company on April 14, 2010.

Table 1.
Kuna Les Schwab Tire Center Individual Assessment Results Summary
and Comparison to Default Values

Factor	2010 Fee Tables	Preliminary Individual Value	Survey Based Individual Value
Floor Area (KSF)	11.696	11.696	11.696
PM Peak Hour Rate (per KSF)	2.075	2.075	1.150
New Trip Factor	0.72	0.72	0.64
Average Trip Length (Miles)	8.23	4.12	3.31
Network Adjustment Factor	0.346	0.346	0.638
VMT Cost	\$2,385	\$2,385	\$2,385
Impact Fee Per Unit	\$10,146	\$5,073	\$3,705
Total Impact Fee	\$118,668	\$59,334	\$43,335
Surety (20%)	-	\$11,867	-
Total Fee Paid	-	\$71,201	-
Refund Due (Including Surety)			\$27,866

As shown in Table 1, based on the count and survey data collected at the Kuna Les Schwab, the PM peak hour trip rate is lower than the ITE rate, the new trip factor is lower, the average trip length is shorter, but the network adjustment factor is higher than the values used both the standard and preliminary individual value impact fee estimates. This results in a lower traffic impact fee of \$43,335. Therefore, a refund of \$27,866 is due relative to the \$71,201 payment made to Ada County on April 14, 2010.

I invite your call if you have any questions regarding this study

Individual Assessment Results

Name of Proposed Development:	Kuna Les Schwab
Fee Payer:	
Site Location:	E Avalon Street
Service Area:	2 - Southwest
Size of Development:	11,696
Development Units	1,000 square feet
ITE Land Use:	Tire Store
ITE Land Use Code:	848
Number of Sites Surveyed:	5

Peak Hour Trip Rate (One-Way):	1.150
New Trip Factor:	0.64
Average Trip Length:	3.31
Network Adjustment Factor:	0.638
VMT Cost:	\$2,385

Gross Traffic Impact Fee Per Development Unit:	\$ 3,705
--	----------

Number of Units:	11.696
------------------	--------

Traffic Impact Fee:	\$ 43,335
---------------------	-----------

Name of Development: Kuna Les Schwab
Address of Development: 975 E Avalon Street
Service Area (choose one): 2 - Southwest
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 11.696
Site Trip Generation Rate: 2.294
Date of Survey: 10/2/2012
Day of Week: Tuesday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 100
Total Site Volume:
Inbound 10
Outbound 13

Data Summary	
Total Trips	17
New Trip Factor	0.94
Ave Trip Length	3.96
Network Adj	0.636
Primary Trips	10
Ave Length	3.47 Miles
Diverted Trips	6
Ave Length	4.78 Miles
Pass-By Trips	1

Trips Summary

Trip #	Primary?	Diverted?	Pass-By?	Trip Length	Mile of Trip
	(Y/N)	(Y/N)	(Y/N)	(Miles)	on County Arterials
1	n	y	n	3.6	3.00
2	y	n	n	2.6	2.00
3	n	y	n	5.4	5.00
4	y	n	n	2.6	2.00
5	n	y	n	1.3	0.00
6	y	n	n	3.4	3.00
7	n	y	n	7.5	0.00
8	n	n	y	-	-
9	y	n	n	3.4	3.00
10	n	y	n	7.5	0.00
11	y	n	n	9.4	8.80
12	y	n	n	3.6	3.00
13	n	y	n	3.4	3.00
14	y	n	n	3.4	3.00
15	y	n	n	1.1	0.50
16	y	n	n	2.6	2.00
17	y	n	n	2.6	2.00

Name of Development: Kuna Les Schwab
Address of Development: 975 E Avalon Street
Service Area (choose one): 2 - Southwest
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 11.696
Site Trip Generation Rate: 2.294
Date of Survey: 10/3/2012
Day of Week: Wednesday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 100
Total Site Volume:
Inbound 13
Outbound 14

Data Summary	
Total Trips	13
New Trip Factor	0.46
Ave Trip Length	2.92
Network Adj	0.486
Primary Trips	4
Ave Length	2.03 Miles
Diverted Trips	2
Ave Length	4.70 Miles
Pass-By Trips	7

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	n	y	n	7.5	0.00
2	n	n	y	-	-
3	n	n	y	-	-
4	y	n	n	2.6	2.00
5	n	n	y	-	-
6	n	n	y	-	-
7	n	n	y	-	-
8	n	n	y	-	-
9	y	n	n	2.6	2.50
10	y	n	n	2.6	2.00
11	y	n	n	0.3	0.20
12	n	y	n	1.9	1.80
13	n	n	y	-	-

Name of Development: Kuna Les Schwab
Address of Development: 975 E Avalon Street
Service Area (choose one): 2 - Southwest
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 11.696
Site Trip Generation Rate: 2.294
Date of Survey: 10/4/2012
Day of Week: Thursday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 100
Total Site Volume:
Inbound 15
Outbound 16

Data Summary	
Total Trips	20
New Trip Factor	0.55
Ave Trip Length	2.81
Network Adj	0.579
Primary Trips	8
Ave Length	1.94 Miles
Diverted Trips	3
Ave Length	5.13 Miles
Pass-By Trips	9

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	n	n	y	-	-
2	n	n	y	-	-
3	n	n	y	-	-
4	n	n	y	-	-
5	n	n	y	-	-
6	n	n	y	-	-
7	n	n	y	-	-
8	n	y	n	4.7	4.10
9	n	n	y	-	-
10	y	n	n	1.6	1.00
11	y	n	n	1.8	1.20
12	y	n	n	1.3	0.70
13	y	n	n	3.4	3.00
14	n	n	y	-	-
15	y	n	n	2.6	2.00
16	n	y	n	8.4	0.90
17	y	n	n	1.6	1.00
18	n	y	n	2.3	1.00
19	y	n	n	0.6	0.50
20	y	n	n	2.6	2.50

Name of Development: Kuna Les Schwab
Address of Development: 975 E Avalon Street
Service Area (choose one): 2 - Southwest
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 11.696
Site Trip Generation Rate: 2.294
Date of Survey: 10/9/2012
Day of Week: Tuesday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 100
Total Site Volume:
Inbound 15
Outbound 9

Data Summary	
Total Trips	22
New Trip Factor	0.68
Ave Trip Length	3.49
Network Adj	0.794
Primary Trips	8
Ave Length	2.74 Miles
Diverted Trips	7
Ave Length	4.36 Miles
Pass-By Trips	7

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	n	n	y	-	-
2	n	y	n	3.8	3.40
3	y	n	n	6.2	5.60
4	n	n	y	-	-
5	y	n	n	2.3	0.00
6	n	y	n	2.5	1.90
7	y	n	n	2.1	1.50
8	n	y	n	0.1	0.00
9	n	n	y	-	-
10	n	y	n	3.4	3.00
11	n	y	n	8.5	8.10
12	n	y	n	9.6	9.00
13	y	n	n	2.5	1.90
14	n	n	y	-	-
15	y	n	n	0.1	0.00
16	n	n	y	-	-
17	n	n	y	-	-
18	n	n	y	-	-
19	y	n	n	2.3	0.00
20	-	-	-	-	-
21	n	y	n	2.6	2.00
22	y	n	n	1.6	1.00
23	y	n	n	4.8	4.20

Name of Development: Kuna Les Schwab
Address of Development: 975 E Avalon Street
Service Area (choose one): 2 - Southwest
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 11.696
Site Trip Generation Rate: 2.294
Date of Survey: 10/10/2012 and 10/11/2012
Day of Week: Wednesday and Thursday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 100
Total Site Volume:
Inbound 26
Outbound 29

Data Summary	
Total Trips	43
New Trip Factor	0.56
Ave Trip Length	3.38
Network Adj	0.698
Primary Trips	16
Ave Length	3.70 Miles
Diverted Trips	8
Ave Length	2.74 Miles
Pass-By Trips	19

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	y	n	n	3.6	3
2	n	n	y	-	-
3	n	y	n	4.4	0
4	n	n	y	-	-
5	n	n	y	-	-
6	n	n	y	-	-
7	n	y	n	0.4	0
8	y	n	n	1.5	0.9
9	n	n	y	-	-
10	n	n	y	-	-
11	y	n	n	9	8.4
12	n	n	y	-	-
13	n	n	y	-	-
14	y	n	n	5.4	0
15	n	n	y	-	-
16	n	n	n	1.3	0.7
17	n	y	n	1.3	0
18	n	n	y	-	-
19	n	y	n	6.8	6.2
20	n	n	y	-	-
21	n	y	n	1.3	0.70
22	y	n	n	0.6	0.3
23	n	y	n	1.3	0
24	n	n	y	-	-
25	n	y	n	4.3	2.00
26	y	n	n	2.8	2.2
27	n	n	y	-	-
28	y	n	n	3.8	3.2
29	y	n	n	0.4	0
30	y	n	n	3.4	3
31	y	n	n	1.8	1.2
32	y	n	n	1.6	1
33	y	n	n	1.6	1
34	y	n	n	1.6	1
35	y	n	n	13.6	13
36	n	y	n	2.1	2
37	n	n	y	-	-
38	n	n	y	-	-
39	n	n	y	-	-
40	y	n	n	3.4	3
41	n	n	y	-	-
42	n	n	y	-	-
43	n	n	y	-	-
44	y	n	n	5.1	4.5



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Redmond, WA 98052-6628
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July 12, 2013

To: Christy Little, Ada County Highway District (ACHD)

Copy: Michael Oxman, Les Schwab Tire Company

From: David Markley, P.E., Transportation Solutions, Inc.

Project: Meridian East Les Schwab Tire Center – Meridian, Idaho

Subject: Traffic Impact Fee Individual Assessment

This memorandum documents the traffic impact fee Individual Assessment study for the Meridian East Les Schwab Tire Center located at 3595 E Ustick Road, Meridian, Idaho. The tire center's location is highlighted in Figure 1.

This study is permitted as part of an agreement between the ACHD and Les Schwab Tire Company whereby Les Schwab has the opportunity to qualify the factors that contribute to the Traffic Impact Fee that was assessed at the time of original approval of this development. On August 8, 2011 Les Schwab Tire Company paid a traffic impact fee of \$147,754 to Ada County to obtain a building permit for their site. This fee was based on ACHD standards for a Tire Store.

The Les Schwab Tire Center is a 12,494 square foot building on a site adjacent to and south of E Ustick Road, west of N Allys Ave and north of E Tecate Lane. The site includes three driveways: one off N Allys Ave and two off E Tecate Lane. The Meridian East Les Schwab Tire Center is located on an individual parcel and does not share access with other commercial parcels in the area.

This Individual Assessment for the Meridian East Les Schwab Tire Center was developed using data collected at the existing site to determine if Les Schwab Tire Company should be assessed a lower traffic impact fee for this site. This assessment was prepared in accordance with the methodologies outlined in the *ACHD Guidebook for Conducting Individual Assessments* (published November 14, 2007) and *ACHD Impact Fee Ordinance No. 208A* (adopted August 2011). The results of this analysis show that the ACHD standard methodology overestimated the impact fees of the Meridian East Les Schwab Tire Center and therefore, a refund of the impact fees are due to Les Schwab Tire Company. Attachment A contains the Individual assessment Results sheet from the *ACHD Guidebook* spreadsheet.

Data Collection

The Meridian East Les Schwab Tire Center has been fully developed. The business has been in operation for over one year. Therefore, to accurately assess the travel pair characteristics associated with this site, surveys were performed to gather the data needed to establish a local peak hour trip generation rate, new trip factor, average trip length, and network adjustment factor.

Surveys were conducted on five weekdays – May 8, 9, 14, 15 and 16.

Peak Hour Trip Rate

Inbound and outbound vehicle counts were also conducted at the site driveways during an average weekday PM peak hour (4-6 PM on Tuesday-Thursday) for days as outlined above.

The five days of survey show the Meridian East Les Schwab Tire Center generates weekday PM peak hour trips at a rate of 2.305 trip per 1,000 sq. ft. of tire center area. Attachment B contains the vehicle counts used to establish this rate.

New Trip Factor, Average Trip Length, and Network Adjustment Factor

Surveys of existing patrons and employees of the existing Meridian East Les Schwab Tire Center were conducted during the same periods as the turning movement counts were conducted. The individuals exiting the site were surveyed using the *Trip Type and Length Questionnaire* contained in the *ACHD Guidelines*. Individuals answering "yes" to question 2 were counted as primary trips and provided a map of Ada County to identify the intersection nearest to where they started their trip. Individuals answering "yes" to question 3 were counted as pass-by trips. Individuals answering "no" to question 3 were counted as diverted trips and provided a map of the site vicinity to identify the nearest intersection that they would have traveled through on their normal route. Attachment C contains the questionnaires and maps used in this assessment. In both instances the length of each trip and the length of each trip on ACHD roadways, was determined using online mapping software.

This data was then entered into the all *ACHD Guidebook* spreadsheet which calculated the new trip, average trip length, and network adjustment factor for this site. Attachment D contains the summary sheets from the *ACHD Guidebook* for all five days of this survey. The five days of this survey resulted in 108 surveys which satisfy the 100 survey requirements established in the *ACHD Guidelines*.

Results

The results of the Meridian East Les Schwab Tire Center Individual Assessment are summarized in the following table. This summary is based on the calculations made in the *ACHD Guidebook* spreadsheet and the traffic impact fee paid by Les Schwab Tire Company on August 11, 2011.

Individual Assessment Results Summary and Comparison to Default Values
Meridian East Les Schwab Tire Center

Factor	2010 Fee Tables	Survey Based Individual Value
Floor Area (KSF)	12.494	12.494
PM Peak Hour Rate (per KSF)	2.075	1.15
New Trip Factor	0.72	0.60
Average Trip Length (Miles)	6.38	2.24
Network Adjustment Factor	0.408	0.676
VMT Cost	\$3,041	\$3,041
Impact Fee Per Unit	\$11,826	\$3,177
Total Impact Fee	\$147,754	\$39,693
Refund Due:		\$108,061

As shown above, based on the count and survey data collected at the Meridian East Les Schwab, the PM peak hour trip rate is lower than the ITE rate, the new trip factor is lower, the average trip length is shorter, but the network adjustment factor is higher than the values used for the impact fee estimate. In summary, this results in a lower traffic impact fee of \$39,693. And therefore, a refund of \$108,061 is due relative to the \$147,754 payment made to Ada County on August 11, 2011.

Please call or email TSI at your convenience if you have any questions regarding this study.

Individual Assessment Results

Name of Proposed Development:	Meridian Les Schwab
Fee Payer:	
Site Location:	3595 E Ustick Road
Service Area:	4 - Northeast
Size of Development:	12,494
Development Units	1000 Square Feet
ITE Land Use:	Tire Store
ITE Land Use Code:	848
Number of Sites Surveyed:	5

Peak Hour Trip Rate (One-Way):	1.15
New Trip Factor:	0.60
Average Trip Length:	2.24
Network Adjustment Factor:	0.676
VMT Cost:	\$3,041

Gross Traffic Impact Fee Per Development Unit:	\$ 3,177
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Number of Units:	12.494
------------------	--------

Traffic Impact Fee:	\$ 39,693
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Name of Development: Meridian Les Schwab
Address of Development: 3595 E Ustick Road
Service Area (choose one): 4 - Northeast
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 12.494
Site Trip Generation Rate: 2.305
Date of Survey: 5/8/2013
Day of Week: Wednesday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 21
Total Site Volume:
 Inbound 11
 Outbound 13

Data Summary	
Total Trips	21
New Trip Factor	0.71
Ave Trip Length	2.17
Network Adj	0.957
Primary Trips	10
Ave Length	2.09 Miles
Diverted Trips	5
Ave Length	2.32 Miles
Pass-By Trips	6

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	y	n	n	3.2	3
2	n	n	y	-	-
3	n	n	y	-	-
4	n	y	n	6	5.3
5	y	n	n	0.2	0.2
6	n	y	n	1.8	1.8
7	n	y	n	2.8	2.8
8	n	n	y	-	-
9	n	n	y	-	-
10	y	n	n	3.2	3.2
11	y	n	n	1.8	1.8
12	n	n	y	-	-
13	y	n	n	0.2	0
14	y	n	n	0.2	0
15	n	n	y	-	-
16	y	n	n	5.7	5.7
17	y	n	n	3.2	3.2
18	n	y	n	0.8	0.8
19	y	n	n	2.4	2.3
20	y	n	n	0.8	0.8
21	n	y	n	0.2	0.2

Name of Development: Meridian Les Schwab
Address of Development: 3595 E Ustick Road
Service Area (choose one): 4 - Northeast
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 12.494
Site Trip Generation Rate: 2.305
Date of Survey: 5/9/2013
Day of Week: Thursday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 16
Total Site Volume:
 Inbound 12
 Outbound 13

Data Summary	
Total Trips	16
New Trip Factor	0.63
Ave Trip Length	1.59
Network Adj	0.686
Primary Trips	8
Ave Length	1.81 Miles
Diverted Trips	2
Ave Length	0.70 Miles
Pass-By Trips	6

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	n	n	y	-	-
2	n	n	y	-	-
3	y	n	n	1.7	1.5
4	n	n	y	-	-
5	y	n	n	0.2	0.2
6	n	n	y	-	-
7	n	n	y	-	-
8	n	y	n	0.2	0.2
9	n	n	y	-	-
10	y	n	n	2.2	1.2
11	n	y	n	1.2	0.2
12	y	n	n	1.2	0.2
13	y	n	n	1.8	1.8
14	y	n	n	3.8	3.8
15	y	n	n	1.8	1.8
16	y	n	n	1.8	1.8

Name of Development: Meridian Les Schwab
Address of Development: 3595 E Ustick Road
Service Area (choose one): 4 - Northeast
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 12.494
Site Trip Generation Rate: 2.305
Date of Survey: 5/14/2013
Day of Week: Tuesday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 28
Total Site Volume:
 Inbound 21
 Outbound 21

Data Summary	
Total Trips	28
New Trip Factor	0.39
Ave Trip Length	1.28
Network Adj	0.681
Primary Trips	2
Ave Length	1.25 Miles
Diverted Trips	9
Ave Length	1.29 Miles
Pass-By Trips	17

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	n	y	n	0.2	0.2
2	n	n	y	-	-
3	n	n	y	-	-
4	n	n	y	-	-
5	n	n	y	-	-
6	n	y	n	1.2	0.2
7	n	n	y	-	-
8	y	n	n	1.3	1.3
9	n	n	y	-	-
10	n	n	y	-	-
11	n	n	y	-	-
12	n	n	y	-	-
13	y	n	n	1.2	0.2
14	n	y	n	1.8	1.8
15	n	y	n	2.3	2.3
16	n	y	n	1.7	0.2
17	n	y	n	1.2	1.2
18	n	n	y	-	-
19	n	y	n	1.2	1.2
20	n	n	y	-	-
21	n	y	n	0.8	0.8
22	n	n	y	-	-
23	n	n	y	-	-
24	n	n	y	-	-
25	n	n	y	-	-
26	n	y	n	1.2	0.2
27	n	n	y	-	-
28	n	n	y	-	-

Name of Development: Meridian Les Schwab
Address of Development: 3595 E Ustick Road
Service Area (choose one): 4 - Northeast
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 12.494
Site Trip Generation Rate: 2.305
Date of Survey: 5/15/2013
Day of Week: Wednesday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 21
Total Site Volume:
 Inbound 15
 Outbound 8

Data Summary	
Total Trips	21
New Trip Factor	0.81
Ave Trip Length	4.18
Network Adj	0.166
Primary Trips	10
Ave Length	5.25 Miles
Diverted Trips	7
Ave Length	2.66 Miles
Pass-By Trips	4

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	y	n	n	1.2	0.2
2	y	n	n	0.1	0
3	n	n	y	-	-
4	n	y	n	2.2	0.2
5	n	n	y	-	-
6	y	n	n	1.6	1.6
7	n	y	n	3.2	2.2
8	y	n	n	24.7	2.4
9	n	n	y	-	-
10	y	n	n	19.4	0.2
11	n	y	n	1.8	1.8
12	y	n	n	0.1	0
13	n	y	n	0.7	0.2
14	n	y	n	6.3	0.2
15	y	n	n	0.8	0.8
16	y	n	n	1.7	0.2
17	y	n	n	1.7	0.2
18	n	y	n	2.2	0.2
19	n	n	y	-	-
20	n	y	n	2.2	0.2
21	y	n	n	1.2	1.2

Name of Development: Meridian Les Schwab
Address of Development: 3595 E Ustick Road
Service Area (choose one): 4 - Northeast
Description of Land Use: Tire Store
ITE Land Use Code: 848
Size of Development: 12.494
Site Trip Generation Rate: 2.305
Date of Survey: 5/16/2013
Day of Week: Thursday
Time Period: PM
Percent Occupied: 100%
Number of Interviews: 22
Total Site Volume:
 Inbound 13
 Outbound 17

Data Summary	
Total Trips	22
New Trip Factor	0.45
Ave Trip Length	1.99
Network Adj	0.889
Primary Trips	4
Ave Length	1.20 Miles
Diverted Trips	6
Ave Length	2.52 Miles
Pass-By Trips	12

Trips Summary

Trip #	Primary? (Y/N)	Diverted? (Y/N)	Pass-By? (Y/N)	Trip Length (Miles)	Mile of Trip on County Arterials
1	n	n	y	-	-
2	n	y	n	0.2	0.2
3	n	y	n	3.8	3.8
4	n	n	y	-	-
5	n	n	y	-	-
6	n	n	y	-	-
7	y	n	n	2.1	2.1
8	n	n	y	-	-
9	n	n	y	-	-
10	n	n	y	-	-
11	y	n	n	1.4	1.4
12	n	n	y	-	-
13	n	y	n	5.3	4.3
14	n	n	y	-	-
15	y	n	n	0.2	0
16	y	n	n	1.1	1.1
17	n	y	n	2.8	2.8
18	n	y	n	1.8	1.8
19	n	y	n	1.2	0.2
20	n	n	y	-	-
21	n	n	y	-	-
22	n	n	y	-	-

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Years 2015 - 2020

TIP Project No.	Project	Dept	2014 Estimate	2015	2016	2017	2018	2019	2020	Future Years	2015 - Future Project Cost
1	Neighborhood Traffic Calming Program	PWE	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000	161,000
2	SE Black Nugget Rd - Retaining Wall Repair	PWE	-	190,000	-	-	-	-	-	2,300,000	2,490,000
3	Mountainside Dr SW Slide Repair	PWE	-	40,000	-	-	-	-	-	-	40,000
4	Street Overlay Program	PWO	390,000	806,000	830,000	855,000	880,000	905,000	930,000	955,000	6,161,000
5	Complete Streets Program	PWE	620,000	645,000	670,000	697,000	724,000	751,000	782,000	809,000	5,078,000
6	Dogwood Bridge Replacement	PWE	212,104	2,418,000	-	-	-	-	-	-	2,418,000
7	N Iss. Rdwy Impvmnts - E Lake Sammamish Pkwy	PWE	673,000	6,801,606	-	-	-	-	-	-	6,801,606
8	N Iss. Rdwy Impvmnts - SE 62nd St/Ext. Imprv.	PWE	4,538,928	9,381,692	10,922,973	12,257,919	-	-	-	-	32,562,584
9	N. Iss. Rdwy Impvmnts - 12th Ave/SR 900/17th Ave	PWE	-	-	189,815	325,372	1,935,007	645,002	-	-	3,095,196
10	NW Sammamish Rd Improvements	PWE	-	50,000	-	-	-	-	-	6,180,000	6,230,000
11	NW Holly Street	PWE	-	-	-	415,300	2,118,355	-	-	-	2,533,655
12	Three Trails Crossing Improvements	PWE	-	-	-	-	190,962	133,674	1,106,519	-	1,431,155
13	NW Gilman Boulevard Safety Improvements	PWE	-	-	-	-	307,000	2,767,000	-	-	3,074,000
14	Issaquah - Pine Lake Road Improvements	PWE	-	-	-	-	1,509,000	1,061,000	2,570,000	6,308,000	11,448,000
15	Tributary 0170 Trail	PWE	-	-	-	-	-	406,000	124,000	2,526,560	3,056,560
16	11th/12th Ave NW Overcrossing Direct Access	PWE	-	-	-	-	-	-	1,030,000	88,976,000	90,006,000
17	SR900/NW Sammamish Road Widening	PWE	-	-	-	-	-	-	670,000	8,973,000	9,643,000
18	NE Gilman Blvd Between Front and XXX Driveway	PWE	-	-	-	-	-	-	-	772,229	772,229
19	NW Dogwood Street Improvements	PWE	-	-	-	-	-	-	-	2,501,000	2,501,000
20	NE Gilman Blvd/3rd Ave NE	PWE	-	-	-	-	-	-	-	745,000	745,000
21	Maple St & Newport Way Intersection Improvements	PWE	-	-	-	-	-	-	-	2,499,000	2,499,000
22	NW Juniper St. Improvements	PWE	-	-	-	-	-	-	-	1,950,000	1,950,000
23	East Sunset Way Improvements	PWE	-	-	-	-	-	-	-	6,410,000	6,410,000
24	Newport Way Improvements (Maple to Sunset)	PWE	-	-	-	-	-	-	-	15,335,000	15,335,000
25	Front St. & Sunset Way Intersection Improvements	PWE	-	-	-	-	-	-	-	905,000	905,000
26	Sammamish Trail Grade Separation At SE 56th St.	PWE	-	-	-	-	-	-	-	5,338,000	5,338,000
27	NW Newport Way West of SR-900	PWE	-	-	-	-	-	-	-	13,644,000	13,644,000
28	Providence Point - Intersection Realignment & Signal	PWE	-	-	-	-	-	-	-	3,605,000	3,605,000
29	NW Maple & 12th Ave NW Intersection Improvement	PWE	-	-	-	-	-	-	-	1,033,000	1,033,000
30	Front St & I-90 Interchange Reconfiguration	PWE	-	-	-	-	-	-	-	44,000,000	44,000,000
31	Front St & Gilman Blvd Intersection Improvements	PWE	-	-	-	-	-	-	-	3,249,000	3,249,000
32	SE 53rd Street Improvements	PWE	-	-	-	-	-	-	-	33,958,000	33,958,000
33	13th Ave NW Improvements	PWE	-	-	-	-	-	-	-	4,100,000	4,100,000
34	15th Avenue NW Improvements	PWE	-	-	-	-	-	-	-	4,600,000	4,600,000
35	11th Avenue NW Improvements	PWE	-	-	-	-	-	-	-	4,672,175	4,672,175
36	NW Mall Street Improvements	PWE	-	-	-	-	-	-	-	15,292,000	15,292,000
37	NW Sammamish Road Non-Motorized Crossing I-90	PWE	-	-	-	-	-	-	-	10,048,000	10,048,000
38	10th Ave NW Non-Motorized Crossing I-90	PWE	-	-	-	-	-	-	-	6,363,000	6,363,000
39	NW Mall Street Pedestrian Corridor	PWE	-	-	-	-	-	-	-	2,662,000	2,662,000
Total Transportation Requests			\$ 6,453,032	\$ 20,352,298	\$ 12,633,788	\$ 14,572,591	\$ 7,687,324	\$ 6,692,676	\$ 7,237,519	\$ 300,734,964	\$ 369,911,160
Non City Funds			\$ 730,600	\$ 17,337,290	\$ 9,743,027	\$ 7,109,321	\$ 824,000	\$ 1,148,800	\$ 1,747,200	\$ -	\$ 38,640,238
Total City Funds			\$ 5,722,432	\$ 3,015,008	\$ 2,890,761	\$ 7,463,270	\$ 6,863,324	\$ 5,543,876	\$ 5,490,319	\$ 300,734,964	\$ 331,270,922






















Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR		NBT	NBR	SBL SBT
Vol, veh/h	40	90		95	50	220 115
Conflicting Peds, #/hr	0	7		0	5	5 0
Sign Control	Stop	Stop		Stop	Stop	Free Free
RT Channelized	-	None		-	None	- None
Storage Length	0	50		-	100	- -
Veh in Median Storage, #	0	-		0	-	- 0
Grade, %	0	-		0	-	- 0
Peak Hour Factor	91	91		91	91	91 91
Heavy Vehicles, %	1	1		1	1	0 0
Mvmt Flow	44	99		104	55	242 126
Major/Minor	Minor1		Minor2		Major2	
Conflicting Flow All	674	12		622	131	7 0
Stage 1	7	-		615	-	- -
Stage 2	667	-		7	-	- -
Critical Hdwy	6.41	-		6.51	6.21	- -
Critical Hdwy Stg 1	-	-		5.51	-	- -
Critical Hdwy Stg 2	5.41	-		-	-	- -
Follow-up Hdwy	3.509	-		4.009	3.309	- -
Pot Cap-1 Maneuver	422	-		404	921	- -
Stage 1	-	-		484	-	- -
Stage 2	512	-		-	-	- -
Platoon blocked, %						-
Mov Cap-1 Maneuver	420	-		0	917	- -
Mov Cap-2 Maneuver	420	-		0	-	- -
Stage 1	-	-		0	-	- -
Stage 2	512	-		0	-	- -
Approach	WB		NB		SB	
HCM Control Delay, s						0
HCM LOS	-		-			
Minor Lane/Major Mvmt	NBLn1	NBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	917	420	-	-	-
HCM Lane V/C Ratio	-	0.06	0.105	-	-	-
HCM Control Delay (s)	-	9.2	14.6	-	-	-
HCM Lane LOS	-	A	B	-	-	-
HCM 95th %tile Q(veh)	-	0.2	0.3	-	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	35	920	675	25	15	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	78	78
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	37	968	711	26	19	45
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	737	0	-	0	1282	368
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	558	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	878	-	-	-	160	635
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	542	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	878	-	-	-	153	635
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	519	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.3		0		18.7	
HCM LOS					C	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	878	-	-	-	326	
HCM Lane V/C Ratio	0.042	-	-	-	0.197	
HCM Control Delay (s)	9.3	-	-	-	18.7	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7	

HCM Signalized Intersection Capacity Analysis

26: Front St & NW Gilman Blvd

3/3/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	665	100	145	30	105	160	100	370	15	85	390	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lane Util. Factor	*0.80	1.00			1.00	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.91			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	2792	1629			1798	1524	1728	3432		1745	1837	1541
Flt Permitted	0.95	1.00			0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	2792	1629			1798	1524	1728	3432		1745	1837	1541
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	700	105	153	32	111	168	105	389	16	89	411	500
RTOR Reduction (vph)	0	35	0	0	0	150	0	2	0	0	0	0
Lane Group Flow (vph)	700	223	0	0	143	18	105	403	0	89	411	500
Confl. Peds. (#/hr)			8			1			1			4
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	Free
Protected Phases	4	4		3	3		1	6		5	2	
Permitted Phases						3						Free
Actuated Green, G (s)	40.2	40.2			15.1	15.1	11.7	52.0		12.7	53.0	140.0
Effective Green, g (s)	40.2	40.2			15.1	15.1	11.7	52.0		12.7	53.0	140.0
Actuated g/C Ratio	0.29	0.29			0.11	0.11	0.08	0.37		0.09	0.38	1.00
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	801	467			193	164	144	1274		158	695	1541
v/s Ratio Prot	c0.25	0.14			c0.08		c0.06	0.12		0.05	c0.22	
v/s Ratio Perm						0.01						c0.32
v/c Ratio	0.87	0.48			0.74	0.11	0.73	0.32		0.56	0.59	0.32
Uniform Delay, d1	47.5	41.2			60.6	56.4	62.6	31.3		61.0	34.8	0.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.7	3.5			12.5	0.1	14.4	0.7		2.7	3.7	0.6
Delay (s)	60.2	44.7			73.1	56.5	77.0	32.0		63.7	38.5	0.6
Level of Service	E	D			E	E	E	C		E	D	A
Approach Delay (s)		56.0			64.1			41.3			21.8	
Approach LOS		E			E			D			C	
Intersection Summary												
HCM 2000 Control Delay			41.9									HCM 2000 Level of Service D
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			140.0							20.0		
Intersection Capacity Utilization			75.3%									ICU Level of Service D
Analysis Period (min)			15									
c Critical Lane Group												

Intersection	
Int Delay, s/veh	6.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	800	185	150	565	35	150
Conflicting Peds, #/hr	0	8	8	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	0	0	1	1	1
Mvmt Flow	851	197	160	601	37	160

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1569
Stage 1	-	-	949
Stage 2	-	-	620
Critical Hdwy	-	4.1	6.82
Critical Hdwy Stg 1	-	-	5.82
Critical Hdwy Stg 2	-	-	5.82
Follow-up Hdwy	-	2.2	3.51
Pot Cap-1 Maneuver	-	672	103
Stage 1	-	-	339
Stage 2	-	-	502
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	668	78
Mov Cap-2 Maneuver	-	-	78
Stage 1	-	-	339
Stage 2	-	-	379

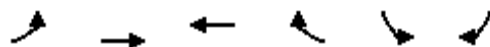
Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	60.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	245	-	-	668	-
HCM Lane V/C Ratio	0.803	-	-	0.239	-
HCM Control Delay (s)	60.7	-	-	12.1	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	6.1	-	-	0.9	-

HCM Signalized Intersection Capacity Analysis

130: NW Gilman Blvd

3/3/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			
Volume (vph)	0	985	600	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0			
Lane Util. Factor		0.95	0.95			
Frt		1.00	1.00			
Flt Protected		1.00	1.00			
Satd. Flow (prot)		3455	3455			
Flt Permitted		1.00	1.00			
Satd. Flow (perm)		3455	3455			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1048	638	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	1048	638	0	0	0
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Turn Type		NA	NA			
Protected Phases		2	6			
Permitted Phases						
Actuated Green, G (s)		36.2	36.2			
Effective Green, g (s)		36.2	36.2			
Actuated g/C Ratio		0.76	0.76			
Clearance Time (s)		5.0	5.0			
Vehicle Extension (s)		5.0	5.0			
Lane Grp Cap (vph)		2611	2611			
v/s Ratio Prot		0.30	0.18			
v/s Ratio Perm						
v/c Ratio		0.40	0.24			
Uniform Delay, d1		2.1	1.8			
Progression Factor		1.00	1.00			
Incremental Delay, d2		0.2	0.1			
Delay (s)		2.3	1.9			
Level of Service		A	A			
Approach Delay (s)		2.3	1.9		0.0	
Approach LOS		A	A		A	
Intersection Summary						
HCM 2000 Control Delay		2.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.37				
Actuated Cycle Length (s)		47.9		Sum of lost time (s)		9.0
Intersection Capacity Utilization		33.3%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

Intersection: 2: NW Juniper St & Rainier Blvd N

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	98	63	141	73	17
Average Queue (ft)	42	39	85	40	4
95th Queue (ft)	129	74	244	100	21
Link Distance (ft)	250		340		17
Upstream Blk Time (%)	1		5		0
Queuing Penalty (veh)	0		0		1
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	0	17	15	0	
Queuing Penalty (veh)	0	7	8	0	

Intersection: 5: NW Gilman Blvd & East Driveway

Movement	EB	EB	WB	SB
Directions Served	L	T	T	LR
Maximum Queue (ft)	42	8	1	75
Average Queue (ft)	24	1	0	43
95th Queue (ft)	49	18	3	90
Link Distance (ft)		103	660	188
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)	50			
Storage Blk Time (%)	1			
Queuing Penalty (veh)	4			

Intersection: 26: Front St & NW Gilman Blvd

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	LT	R	L	T	TR	L	T	R
Maximum Queue (ft)	292	309	197	175	35	124	171	178	190	369	46
Average Queue (ft)	210	226	111	102	10	69	115	118	100	250	7
95th Queue (ft)	307	319	207	183	36	139	181	190	216	404	101
Link Distance (ft)		660	660	1244	1244		1124	1124		497	497
Upstream Blk Time (%)										0	0
Queuing Penalty (veh)										0	0
Storage Bay Dist (ft)	600					150			175		
Storage Blk Time (%)						1	3		0	20	
Queuing Penalty (veh)						2	3		1	18	

Intersection: 39: NW Juniper St & NW Gilman Blvd

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	LR
Maximum Queue (ft)	26	81	52	9	32
Average Queue (ft)	5	55	7	1	30
95th Queue (ft)	24	84	58	21	34
Link Distance (ft)	305		103	103	17
Upstream Blk Time (%)		1	1	0	44
Queuing Penalty (veh)		0	3	0	89
Storage Bay Dist (ft)		75			
Storage Blk Time (%)		6	0		
Queuing Penalty (veh)		18	0		

Intersection: 130: NW Gilman Blvd

Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	74	61	37	56
Average Queue (ft)	16	13	7	12
95th Queue (ft)	66	58	37	49
Link Distance (ft)	690	690	305	305
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 154






















Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR		NBT	NBR	SBL SBT
Vol, veh/h	40	90		95	50	225 120
Conflicting Peds, #/hr	0	7		0	5	5 0
Sign Control	Stop	Stop		Stop	Stop	Free Free
RT Channelized	-	None		-	None	- None
Storage Length	0	50		-	100	- -
Veh in Median Storage, #	0	-		0	-	- 0
Grade, %	0	-		0	-	- 0
Peak Hour Factor	91	91		91	91	91 91
Heavy Vehicles, %	1	1		1	1	0 0
Mvmt Flow	44	99		104	55	247 132
Major/Minor	Minor1		Minor2		Major2	
Conflicting Flow All	691	12		638	137	7 0
Stage 1	7	-		631	-	- -
Stage 2	684	-		7	-	- -
Critical Hdwy	6.41	-		6.51	6.21	- -
Critical Hdwy Stg 1	-	-		5.51	-	- -
Critical Hdwy Stg 2	5.41	-		-	-	- -
Follow-up Hdwy	3.509	-		4.009	3.309	- -
Pot Cap-1 Maneuver	412	-		396	914	- -
Stage 1	-	-		476	-	- -
Stage 2	503	-		-	-	- -
Platoon blocked, %						-
Mov Cap-1 Maneuver	410	-		0	911	- -
Mov Cap-2 Maneuver	410	-		0	-	- -
Stage 1	-	-		0	-	- -
Stage 2	503	-		0	-	- -
Approach	WB		NB		SB	
HCM Control Delay, s						0
HCM LOS	-		-			
Minor Lane/Major Mvmt	NBLn1	NBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	911	410	-	-	-
HCM Lane V/C Ratio	-	0.06	0.107	-	-	-
HCM Control Delay (s)	-	9.2	14.8	-	-	-
HCM Lane LOS	-	A	B	-	-	-
HCM 95th %tile Q(veh)	-	0.2	0.4	-	-	-

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	45	945	685	36	20	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	78	78
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	47	995	721	38	26	64
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	759	0	-	0	1332	379
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	592	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	862	-	-	-	148	625
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	521	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	862	-	-	-	140	625
Mov Cap-2 Maneuver	-	-	-	-	140	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	493	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.4		0		21	
HCM LOS					C	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	862	-	-	-	314	
HCM Lane V/C Ratio	0.055	-	-	-	0.286	
HCM Control Delay (s)	9.4	-	-	-	21	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0.2	-	-	-	1.2	

HCM Signalized Intersection Capacity Analysis

26: Front St & NW Gilman Blvd

3/3/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	684	106	151	30	111	165	106	380	15	85	400	489
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lane Util. Factor	*0.80	1.00			1.00	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.91			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	2792	1631			1799	1524	1728	3432		1745	1837	1541
Flt Permitted	0.95	1.00			0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	2792	1631			1799	1524	1728	3432		1745	1837	1541
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	720	112	159	32	117	174	112	400	16	89	421	515
RTOR Reduction (vph)	0	34	0	0	0	155	0	2	0	0	0	0
Lane Group Flow (vph)	720	237	0	0	149	19	112	414	0	89	421	515
Confl. Peds. (#/hr)			8			1			1			4
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	Free
Protected Phases	4	4		3	3		1	6		5	2	
Permitted Phases						3						Free
Actuated Green, G (s)	39.4	39.4			15.4	15.4	12.2	52.0		13.2	53.0	140.0
Effective Green, g (s)	39.4	39.4			15.4	15.4	12.2	52.0		13.2	53.0	140.0
Actuated g/C Ratio	0.28	0.28			0.11	0.11	0.09	0.37		0.09	0.38	1.00
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	785	459			197	167	150	1274		164	695	1541
v/s Ratio Prot	c0.26	0.15			c0.08		c0.06	0.12		0.05	c0.23	
v/s Ratio Perm						0.01						c0.33
v/c Ratio	0.92	0.52			0.76	0.11	0.75	0.33		0.54	0.61	0.33
Uniform Delay, d1	48.7	42.3			60.5	56.2	62.4	31.5		60.5	35.1	0.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	17.3	4.1			13.6	0.1	16.1	0.7		2.0	3.9	0.6
Delay (s)	66.1	46.4			74.1	56.3	78.5	32.1		62.5	39.0	0.6
Level of Service	E	D			E	E	E	C		E	D	A
Approach Delay (s)		60.7			64.5			42.0			21.7	
Approach LOS		E			E			D			C	
Intersection Summary												
HCM 2000 Control Delay			43.7									HCM 2000 Level of Service D
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			140.0									Sum of lost time (s) 20.0
Intersection Capacity Utilization			76.5%									ICU Level of Service D
Analysis Period (min)			15									
c Critical Lane Group												

Intersection	
Int Delay, s/veh	8.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	830	190	156	589	35	156
Conflicting Peds, #/hr	0	8	8	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	0	0	1	1	1
Mvmt Flow	883	202	166	627	37	166

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1629
Stage 1	-	-	984
Stage 2	-	-	645
Critical Hdwy	-	4.1	6.82
Critical Hdwy Stg 1	-	-	5.82
Critical Hdwy Stg 2	-	-	5.82
Follow-up Hdwy	-	2.2	3.51
Pot Cap-1 Maneuver	-	651	94
Stage 1	-	-	325
Stage 2	-	-	487
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	647	69
Mov Cap-2 Maneuver	-	-	69
Stage 1	-	-	325
Stage 2	-	-	360

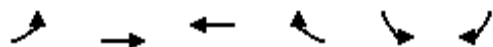
Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	78.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	229	-	-	647	-
HCM Lane V/C Ratio	0.887	-	-	0.257	-
HCM Control Delay (s)	78.5	-	-	12.5	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	7.3	-	-	1	-

HCM Signalized Intersection Capacity Analysis

130: NW Gilman Blvd

3/3/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			
Volume (vph)	0	1020	624	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0			
Lane Util. Factor		0.95	0.95			
Frt		1.00	1.00			
Flt Protected		1.00	1.00			
Satd. Flow (prot)		3455	3455			
Flt Permitted		1.00	1.00			
Satd. Flow (perm)		3455	3455			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1085	664	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	1085	664	0	0	0
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Turn Type		NA	NA			
Protected Phases		2	6			
Permitted Phases						
Actuated Green, G (s)		36.2	36.2			
Effective Green, g (s)		36.2	36.2			
Actuated g/C Ratio		0.76	0.76			
Clearance Time (s)		5.0	5.0			
Vehicle Extension (s)		5.0	5.0			
Lane Grp Cap (vph)		2611	2611			
v/s Ratio Prot		0.31	0.19			
v/s Ratio Perm						
v/c Ratio		0.42	0.25			
Uniform Delay, d1		2.1	1.8			
Progression Factor		1.00	1.00			
Incremental Delay, d2		0.2	0.1			
Delay (s)		2.3	1.9			
Level of Service		A	A			
Approach Delay (s)		2.3	1.9		0.0	
Approach LOS		A	A		A	
Intersection Summary						
HCM 2000 Control Delay		2.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.39				
Actuated Cycle Length (s)		47.9		Sum of lost time (s)		9.0
Intersection Capacity Utilization		33.3%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

Queuing and Blocking Report
2016 With Project

3/3/2015

Intersection: 2: NW Juniper St & Rainier Blvd N

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	114	68	169	101	19
Average Queue (ft)	53	46	84	43	4
95th Queue (ft)	147	81	199	109	18
Link Distance (ft)	250		340		17
Upstream Blk Time (%)			1		0
Queuing Penalty (veh)			0		1
Storage Bay Dist (ft)		50		100	
Storage Blk Time (%)	2	22	19	0	
Queuing Penalty (veh)	2	10	10	0	

Intersection: 5: NW Gilman Blvd & East Driveway

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	41	100
Average Queue (ft)	24	58
95th Queue (ft)	50	115
Link Distance (ft)		188
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	1	
Queuing Penalty (veh)	4	

Intersection: 26: Front St & NW Gilman Blvd

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	TR	LT	R	L	T	TR	L	T
Maximum Queue (ft)	300	322	230	168	42	140	162	162	195	374
Average Queue (ft)	223	239	130	102	13	85	111	111	90	258
95th Queue (ft)	326	340	256	182	50	162	174	180	191	407
Link Distance (ft)		660	660	1244	1244		1124	1124		497
Upstream Blk Time (%)										0
Queuing Penalty (veh)										0
Storage Bay Dist (ft)	600					150			175	
Storage Blk Time (%)						1	2		0	20
Queuing Penalty (veh)						3	2		0	18

Intersection: 39: NW Juniper St & NW Gilman Blvd

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	LR
Maximum Queue (ft)	13	93	88	19	36
Average Queue (ft)	3	58	20	4	31
95th Queue (ft)	15	96	89	36	38
Link Distance (ft)	305		103	103	17
Upstream Blk Time (%)		1	1	0	49
Queuing Penalty (veh)		0	4	0	100
Storage Bay Dist (ft)		75			
Storage Blk Time (%)		9	0		
Queuing Penalty (veh)		29	0		

Intersection: 130: NW Gilman Blvd

Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	69	64	34	52
Average Queue (ft)	16	12	7	13
95th Queue (ft)	69	62	40	51
Link Distance (ft)	690	690	305	305
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 184

August 4, 2017

To: Jean Lin, Senior Planner, City of Issaquah Development Services

From: Jeff Hee, TSI

Subject: Gilman Point Workloft Trip Generation Analysis/Transportation Concurrency
160 NW Gilman Blvd, Issaquah, WA

This analysis focuses on the trip generation analysis for the Transportation Concurrency Application for the proposed Gilman Point Workloft site. This study responds to your comments (dated July 24, 2017) and is specific to the trip generation analysis.

Project Description

Gilman Point is located at 160th NW Gilman Boulevard. Phase 1 includes the self-storage warehouse parcel, and is currently under construction.

Phase 2 includes 48,513 square feet of workloft building area with up to 200 units, 2,500 square feet of commercial retail space.

Gilman Point was formerly approved with 10,800 square feet of tire superstore space, which is now proposed to be replaced with the workloft site.

As you are aware the Applicant, is proposing to complete a portion of the City's non-motorized improvement, and provide a signalized trail crossing at NW Gilman Boulevard and NW Juniper Street. The new signal would also include a new north-leg to facilitate the Eastlake Trail crossing NW Gilman Boulevard and a full-access to the Gilman Point site and other commercial businesses north of NW Gilman Boulevard.

For reference a vicinity map and a conceptual site plan are attached.

Trip Generation

Commercial Use

The ITE Land Use Code 826, "Specialty Retail Center", was used to document trip generation for the proposed 2,500 square feet of commercial space. Table 1 summarizes the trip generation calculations.

Table 1: Commercial Retail PM Peak Hour Trip Generation

Land Use	Size	Trip Rate	%in	%out	Pass-By ¹	In	Out	Total
Retail	2,500 SF	0.002710	44%	56%	34%	2	3	5

1. Shopping Center Pass-By Rate (typical)

Workloft Use Trip Generation Study

The proposed workloft use is unique and is not like other typical office or retail uses. Thus, trip generation for the proposed use was evaluated based on the PM peak hour trips generated at other workloft sites.

Two existing workloft sites were reviewed for their PM peak hour trip generation characteristics:

- North Seattle ActivSpace. Located at 10051 Lake City Way NE includes 30,948 SF of workloft space with 200 units. PM peak hour trip generation was evaluated over seven days between 2000 and 2017 in both the afternoon and morning.
- Renton Creative Space. Located at 401 Olympia Ave includes 24,408 SF of workloft space with 125 units and 3,304 SF of commercial space. PM peak hour trip generation was evaluated over two days in 2017. The site's commercial uses front NE 4th Street and are served primarily by the site's south driveway. The workloft parking is at the or rear of the building and is served by two driveways off Olympia Ave.

The PM peak hour trip generation is summarized in Table 2.

Table 2: Workloft Use Trip Generation

Location	Workloft (Units)	Comm. (GFA)	PM Trips Generated			PM Trip Rate ¹	Count Date
			In	Out	Total		
North Seattle	200	n/a	8	8	16	0.080	12/14/00
	200	n/a	9	8	17	0.085	02/08/01
	200	n/a	10	10	20	0.100	08/01/17
Renton	125	3,304	12	17	29	0.232	07/26/17
	125	3,304	6	12	18	0.144	08/01/17

1. PM Trip Ratio expressed as PM peak hour trips per workloft unit

The workloft use PM peak hour trip rates ranged from 0.080 trips per unit to 0.312 trips per unit.

Excluding the years 2000 and 2001 data, the average PM peak hour trip rate is 0.160 trips per unit [= (0.100 + 0.232 + 0.144) trips per unit ÷ 3 study dates].

The proposed development includes up to 200 workloft units. Using the average PM peak hour trip generation rate of 0.160 trips per unit, the proposed workloft development is forecast to generate up to 32 PM peak hour trips, split 14 in and 18 out.

ITE Comparison

Table 3 compares the PM peak hour trip generation of the workloft use with the PM peak hour trips generated by the following ITE Land Uses:

- 110 General Light Industrial
- 130 Industrial Park
- 710 General Office Building
- 750 Office Park
- 760 Research and Development Park
- 770 Business Park

Table 3: Workloft Use PM Trip Generation Comparison

Land Use	Size	PM Trip Rate	PM Trips
Workloft (48,513 SF)	200 units	0.16/unit	32
General Light Industrial	48,513 SF	0.85/1,000 SF	52
Industrial Park	48,513 SF	0.97/1,000 SF	46
General Office Building	48,513 SF	1.48/1,000 SF	80
Office Park	48,513 SF	1.48/1,000 SF	80
Research and Development Park	48,513 SF	1.07/1,000 SF	58
Business Park	48,513 SF	1.26/1,000 SF	68

Based on the PM trip data from the Renton and North Seattle sites, the proposed workloft land use is shown to generate between 40% and 70% of the PM trips of common ITE industrial and office land uses.

Development PM Peak Hour Trip Generation

Table 4 summarizes the PM peak hour trip generation calculations for the proposed workloft site.

Table 4: Development PM Peak Hour Trip Generation

Land Use	Size	Trip Rate	%in	%out	Pass-By ¹	In	Out	Total
Retail	2,500 SF	0.002710	44%	56%	34%	2	3	5
Workloft	200 units	0.080000	43%	57%	-	14	18	32
PM Trips:					2	16	21	37

2. Retail pass-by trips only

Concurrency Application

As indicated above, originally Gilman Point was approved with a 10,800-square foot Les Schwab Tire Center. The traffic impacts and trip generation associated with the approved Gilman Point development were published and approved via the March 9, 2015 Gilman Point Traffic Impact Study.

Table 5 compares the forecasted PM peak hour trips generated with the current workloft proposal site and former-approved Les Schwab Tire Center.

Table 5: Gilman Point Workloft Site Concurrency Trip Generation

Land Use	Size	Trip Rate	Driveway Trips	Pass-By Trips	New Trips
Retail	2,500 SF	0.002710	7	34%	5
Workloft	200 units	0.080000	32	-	32
Proposed:			39	2	37
Les Schwab	10,800 SF	0.002240	24	41%	14
Approved:			24	10	14
Difference:			15	(8)	23

For the purposes of evaluating Transportation Concurrency, the trips generated by the former Les Schwab Tire Center use were approved for development by the City of Issaquah. The workloft proposal is replacing the former-approved land use. Therefore, the net trip impacts to the City of Issaquah's Traffic Model are the difference (23 trips) between the PM peak hour trips generated by workloft proposal (37 total trips) and trips generated by the Les Schwab Tire Center (14 total trips).

Conclusion

The proposal is forecast to generate 37 PM peak hour trips, split 16 in and 21 out, plus 2 retail pass-by trips to the local road network.

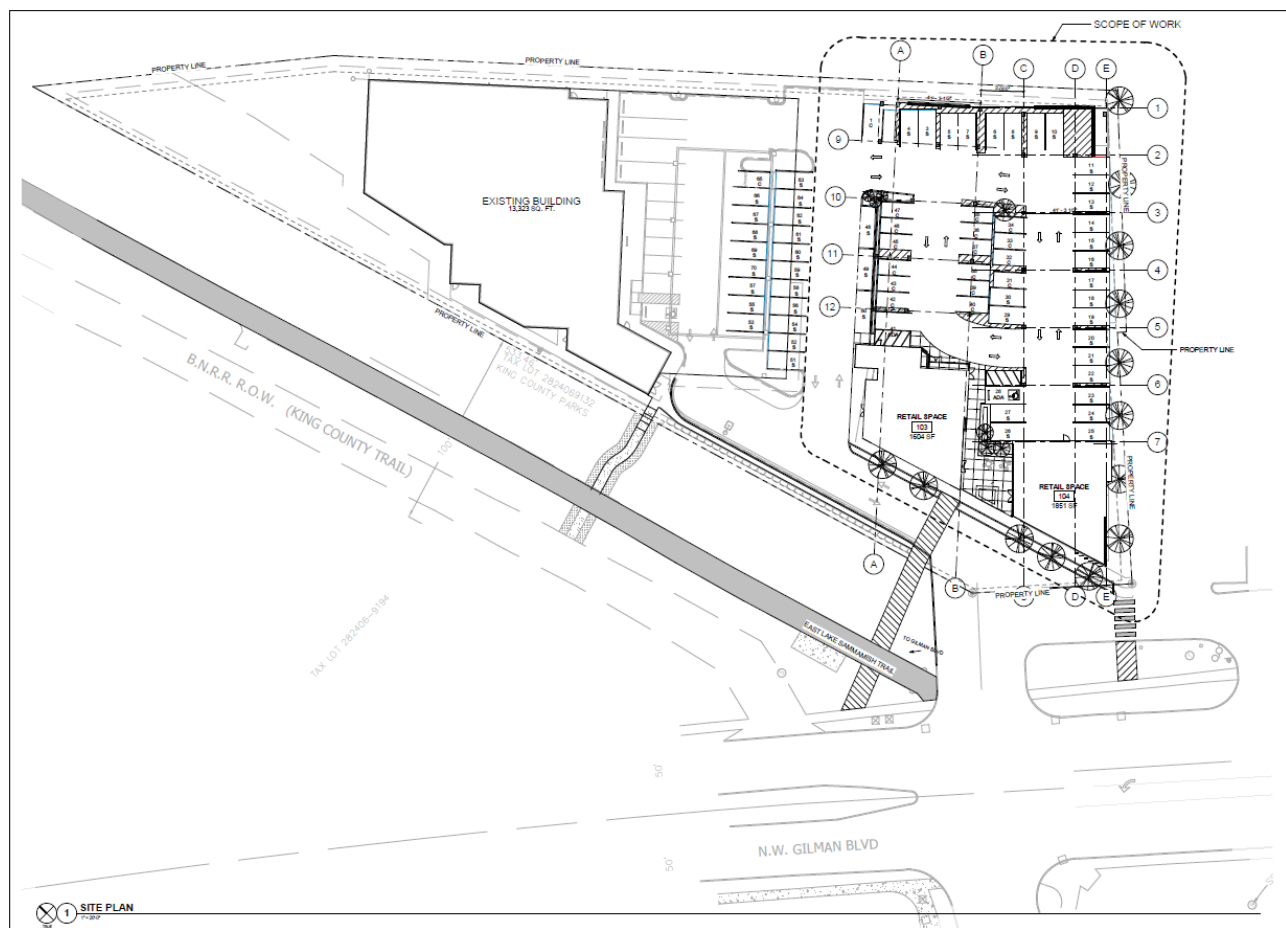
Issaquah's PM peak hour trip threshold for preparing a formal Traffic Impact Analysis is 30 net new trips.

Compared to the formerly approved Les Schwab Tire Center use, the difference in net new trips generated by the proposal (37 trips) and the tire center (14 trips) is less than 30 new PM peak hour trips.

A limited scope traffic study focusing the proposed traffic control signal at Gilman Boulevard and Juniper Street is proposed to document development impacts.

A copy of the Transportation Concurrency Application is included with this document.

We request a copy of the traffic model output from the concurrency test and Synchro files. The request for copies of the City's Synchro files was submitted directly to Fay Schafi on July 25, 2017.



Conceptual Site Plan